

# CITY COUNCIL AGENDA ITEM COVER MEMO

Agenda Item Number \_\_\_\_\_

Meeting Type: Regular

Meeting Date: 4/25/2013

Action Requested By:  
Engineering

Agenda Item Type  
Resolution

Subject Matter:

Agreement with Arcadis U. S., Inc.

Exact Wording for the Agenda:

Resolution authorizing the Mayor to enter into an agreement with Arcadis U. S., Inc. for Engineering Design Services for Dallas Branch/Pinhook Creek, Phase I, Project No. 65-13-DR03

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

Item to be considered for: Action

Unanimous Consent Required: No

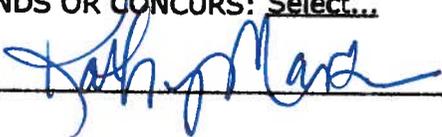
Briefly state why the action is required; why it is recommended; what Council action will provide, allow and accomplish and; any other information that might be helpful.

Engineering services contract in support of a Hazard Mitigation Grant Program application for a proposed flood improvement project on Pinhook Creek/Dallas Branch to include cost-benefit analysis, final design plans, and permits. Design services in a Not to Exceed (NTE) ceiling price of \$182,350.00. Account No. 23-6500-0816-8214

Associated Cost:

Budgeted Item: Select...

MAYOR RECOMMENDS OR CONCURS: Select...

Department Head: 

Date: 4/18/13

revised 3/12/2012

*AP  
PK  
A-H*

# ROUTING SLIP CONTRACTS AND AGREEMENTS

Originating Department: **Engineering**

Council Meeting Date: **4/25/2013**

Department Contact: **Lynn Majors**

Phone # **256-427-5201**

Contract or Agreement: **Hazard Mitigation Application & Design Plans**

Document Name: **Dallas Branch/Pinhook Crk Phase I Project No. 65-13-DR03**

City Obligation Amount: **\$182,350.00**

Total Project Budget: **0**

Uncommitted Account Balance: **\$182,350.00**

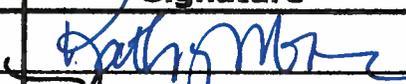
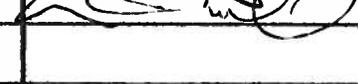
Account Number: **23-6500-0816-8214**

## Procurement Agreements

<b><u>Not Applicable</u></b>	<b><u>Not Applicable</u></b>
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## Grant-Funded Agreements

<b><u>Not Applicable</u></b>	<b>Grant Name:</b>
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Department	Signature	Date
1) Originating		4/18/13
2) Legal		4-15-13
3) Finance		4/19/13
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, to enter into an agreement with Arcadis U. S., Inc. in the amount of ONE HUNDRED EIGHTY-TWO THOUSAND THREE HUNDRED FIFTY AND NO/100 DOLLARS (\$182,350.00) for Engineering Design Services for Dallas Branch/Pinhook Creek, Phase I, Project No. 65-13-DR03, in Huntsville, Alabama, on behalf of the City of Huntsville, a municipal corporation in the State of Alabama, which said agreement is substantially in words and figures similar to that document attached hereto and identified as "Agreement between City of Huntsville and Arcadis U. S., Inc. for Engineering Design Services for Dallas Branch/Pinhook Creek, Phase I, Project No. 65-13-DR03" consisting of a total of nineteen (19) pages plus forty-seven (47) additional pages consisting of Attachments 1-15, and the date of April 25, 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 25th day of April, 2013.

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

**APPROVED** this the 25th day of April, 2013.

\_\_\_\_\_  
Mayor of the City of Huntsville,  
Alabama

**AGREEMENT BETWEEN**  
**CITY OF HUNTSVILLE, ALABAMA**  
**AND**  
**ARCADIS U. S., INC.**  
**FOR**  
**ENGINEERING DESIGN SERVICES**  
**FOR**  
**DALLAS BRANCH/PINHOOK CREEK, PHASE I**

**Project I.D Number 65-13-DR03**  
**April 25, 2013**

\_\_\_\_\_  
**President of the City Council of the City of**  
**Huntsville, AL**  
**Date: April 25, 2013**

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**AGREEMENT BETWEEN**  
**CITY OF HUNTSVILLE, ALABAMA**  
**AND**  
**ARCADIS U. S., INC.**  
**FOR**  
**ENGINEERING DESIGN SERVICES**  
**FOR**  
**DALLAS BRANCH/PINHOOK CREEK, PHASE I**  
  
**Project I.D Number 65-13-DR03**

THIS AGREEMENT made as of the 25th day of April in the year 2013, by and between the CITY OF HUNTSVILLE, ALABAMA (hereinafter called OWNER), and ARCADIS U. S., INC., (hereinafter called ENGINEER).

WITNESSETH, for the considerations hereinafter set forth, the parties hereto agree as follows:

**ARTICLE 1 - ENGAGEMENT OF THE ENGINEER**

The OWNER hereby engages the ENGINEER, and the ENGINEER hereby accepts the engagement to provide general engineering and consultation as a representative of the OWNER to include the following:

- 1.1 Professional engineering services for design of Dallas Branch/Pinhook Creek, Phase I, as further described in ARTICLE 2, and hereinafter called PROJECT.
- 1.2 By executing this Agreement, the ENGINEER represents to the OWNER that the ENGINEER is a professional qualified to act as the ENGINEER for the PROJECT and is licensed and certified to practice engineering by all public entities having jurisdiction over the ENGINEER and the PROJECT. The ENGINEER further represents to the OWNER that the ENGINEER will maintain all necessary licenses, certifications, permits or other authorizations necessary to act as ENGINEER for the PROJECT until the ENGINEER's remaining duties hereunder have been satisfied. The ENGINEER shall assign only qualified personnel to perform any service concerning the PROJECT. All services rendered by the ENGINEER for the PROJECT shall be performed by or under the immediate supervision of experienced and qualified professionals licensed, certified, and registered as appropriate in the State of Alabama possessing the expertise in the discipline of the service being rendered. The ENGINEER assumes full responsibility to the OWNER for the negligent acts, errors and omissions of its consultants or others employed or retained by the ENGINEER in connection with the PROJECT.
- 1.3 Execution of this Agreement by the ENGINEER constitutes a representation that the ENGINEER has become familiar with the PROJECT site and the local conditions under which the PROJECT is to be implemented. The ENGINEER agrees to provide all necessary

engineering services required to professionally accomplish the ENGINEER's defined scope of services.

## **ARTICLE 2 – DESIGN SERVICES OF THE ENGINEER**

- 2.1** ENGINEER shall provide for OWNER professional engineering services for design of Dallas Branch/Pinhook Creek, Phase I.
- 2.2** These services shall include consultation and advice; customary civil, structural, mechanical and electrical engineering design services; and Architectural services incidental thereto, as outlined herein and further described in the SCOPE OF SERVICES, ATTACHMENT 1.
- 2.3** Upon the OWNERS authorization, the ENGINEER shall prepare construction documents consisting of drawings and specifications setting forth in detail the requirements for construction of the PROJECT. The ENGINEER warrants that such construction documents are accurate, coordinated and adequate for the construction and in conformity and comply with applicable laws, codes and regulations. Products specified for use shall be readily available unless written authorization to the contrary is given by the OWNER. Products or materials specified by the ENGINEER that are available from only one source shall be justified in writing by the ENGINEER in order to meet applicable federal, state, or local procurement or bid requirements.
- 2.4** The ENGINEER shall prepare appropriate bid alternates as necessary in order to assure that the PROJECT can be awarded within the PROJECT budget limitations.
- 2.5** The ENGINEER shall serve as the OWNER's professional representative in those portions of the PROJECT to which this Agreement applies and shall consult with and advise the OWNER during the performance of these services.
- 2.6** The ENGINEER shall incorporate into its design, and into its final work products, the requirements contained within the OWNER's engineering standards, standard specifications, and design manuals referenced in ATTACHMENT 3. The requirements of the State of Alabama Department of Transportation design standards shall be reviewed for applicability and incorporated into portions of the work where joint participation between the OWNER and the State is applicable. When conflicts are noted between the OWNERS requirements and standards of others, the OWNERS standards shall take precedent. Discrepancies shall be brought to the attention of the OWNER. Deviations from OWNER's requirements shall be identified to the OWNER by the ENGINEER in writing prior to incorporating the changes.
- 2.7** The ENGINEER shall obtain all Planning Commission approvals with regard to location, character and extent, as required.
- 2.8** The ENGINEER shall obtain a Utility Project Notification Form (Attachment 10) from all affected utilities on the project by the 60% design review stage. Acceptance shall be provided as a signed original by all affected parties at the 90% design review stage.
- 2.9** The ENGINEER shall promptly correct, or have corrected, any errors, omissions, deficiencies or conflicts in the ENGINEER's work product or that of his sub-contractors/sub-consultants, without additional compensation for time, reproduction or distribution.
- 2.10** During the process of design and preparation of the construction documents, the ENGINEER shall review with the OWNER the construction documents, the estimate of probable construction cost, schedule, and other design services issues. Such review shall be, at a minimum, as outlined in ATTACHMENT 4 as 0%, 30%, 60%, and 90% completion stage.

Following such reviews, the ENGINEER shall make any appropriate revisions thereto to assure compliance with the OWNER's requirements.

- 2.11** Field surveying work is required and shall be performed in accordance with "Standards of Practice for Surveying in the State of Alabama" as required by the Alabama Board of Registration for Engineering and Land Surveyors. Surveying shall include P.K. Nails or other permanent stationing markings as well as staking of right-of-way, easements and parcels of land acquired by the City of Huntsville. Property corners shall be set at the new right-of-way. Easements shall be staked as requested by the City of Huntsville. The above field work shall be performed as a minimum as needed at the time of right-of-way acquisition and one additional time near the 100% submittal stage as determined by the OWNER. The cost for these services is included in the fees for Basic Services.

Survey data shall be based on a US Public Land Survey System corner or quarter corner. Said corner or quarter corner shall be field verified by the surveyor and a state plane coordinate provided in deliverables submitted to the City of Huntsville. All survey work shall be based on the following datum's:

Coordinate System:	US State Plane
Zone:	Alabama East 0101
Vertical Datum:	The North American Vertical Datum of 1988 (NAVD 88)
Horizontal Datum:	The North American Datum of 1983 (NAD 83)
Geoid Model:	Geoid03
Units:	US Survey Feet

- 2.12** The ENGINEER shall comply with the City of Huntsville Tree Ordinance and carry the requirements referenced therein with deliverables (drawings, specifications, etc.) in accordance with Section 27-57 of the City of Huntsville Code of Ordinances (Ord. No. 04-45, §13, 2-12-2004).
- 2.13** The ENGINEER shall prepare the prebid agenda after obtaining comments from stakeholders such as affected utilities, City of Huntsville Construction Project Engineer and Inspector(s), and other City of Huntsville departments as applicable. The ENGINEER shall moderate the prebid meeting, prepare meeting minutes, make clarifications, prepare addendums, and distribute to bidders.
- 2.14** A valid City of Huntsville license shall be maintained throughout the term of this contract. Additionally, the engineering firm shall be required to obtain and pay for all other federal, state or local permits, licenses, and fees which may be necessary or required in order to perform the work detailed herein.

### **ARTICLE 3 - CONSTRUCTION ADMINISTRATION SERVICES**

**OMITTED**

### **ARTICLE 4 - ADDITIONAL SERVICES**

The following services of the ENGINEER are not included in Article 2. Nevertheless, the ENGINEER shall provide such services if authorized in writing by the OWNER, and they shall be paid for by the OWNER as provided in Article 7, unless otherwise noted.

- 4.1** Making revision in drawings, specifications or other documents when such revisions are inconsistent with written direction by the OWNER previously given, are required by the enactment of revision of codes, laws or regulations subsequent to the preparation of such

documents and not reasonably anticipated, or are due to other causes not within the control or responsibility of the ENGINEER, either in whole or in part.

- 4.2 Preparing drawings, specifications and supporting data in connection with change orders, provided that such change orders are issued by the OWNER due to causes not within the control or responsibility of the ENGINEER, either in whole or in part.
- 4.3 Providing additional services for repair or replacement of work damaged by acts of God or other cause during construction provided that such services are required by causes not the responsibility of the ENGINEER, either in whole or in part.
- 4.4 Providing services not otherwise required herein which are made necessary solely by the default of the ENGINEER or major defects or deficiencies in the work of the ENGINEER. These services shall be provided with no increase in the contract amount and will not be compensable on an hourly basis.
- 4.5 Providing expert witness services and other services arising out of claims.
- 4.6 Provide services to stake site during construction.

## **ARTICLE 5 - RESPONSIBILITIES OF OWNER**

The OWNER, without cost to the ENGINEER, will perform the following in a timely manner so as not to delay the services of the ENGINEER:

- 5.1 Assist ENGINEER by placing at ENGINEER's disposal all available information pertinent to the PROJECT including previous reports and any other data relative to design or construction of the PROJECT.
- 5.2 Provide all criteria and full information as to OWNER's requirements for the PROJECT, including design objectives and constraints, space, capacity and performance requirements, flexibility and expendability, and any budgetary limitations. The OWNER shall also furnish copies of all design and construction standards, which OWNER will require to be included in the drawings and specifications.
- 5.3 Assist the ENGINEER as necessary in acquiring access to and making all provisions for the ENGINEER to enter upon public and private lands as required for the ENGINEER to perform the work under this agreement.
- 5.4 Designate in writing a person to act as the OWNER's representative with respect to the work to be performed under this Agreement, such person to have complete authority to transmit instructions, receive information, interpret and define the OWNER's policies and decision with respect to materials, equipment elements and systems pertinent to the work covered by this Agreement. Examine all studies, reports, sketches, drawings, specifications, proposals and other documents presented by ENGINEER, obtain advice of an attorney, insurance counselor and other consultants as OWNER determines appropriate for such examination and render in writing decisions pertaining thereto within a reasonable time so as not to delay the services of ENGINEER.
- 5.5 When requested by the ENGINEER, the OWNER will intercede on the ENGINEER's behalf when data from, or reviewed by third parties is not on schedule through no fault of the ENGINEER
- 5.6 The OWNER's review of any documents prepared by the ENGINEER or its consultants shall be solely for the purpose of determining whether such documents are generally consistent

with the OWNER's intent. No review of such documents shall relieve the ENGINEER of its responsibility for the accuracy, adequacy, fitness, suitability and coordination of its work product.

## **ARTICLE 6 - PERIOD OF SERVICES**

- 6.1** The ENGINEER shall commence services pursuant to this agreement as of April 26, 2013. The final completion date for the completion of design services as outlined in Article 2 shall be November 26, 2013.

The ENGINEER shall perform these services with reasonable diligence and expediency consistent with sound professional practices. The ENGINEER shall include in his schedule an allowance for time required for OWNER's review of submissions and for approvals of authorities having jurisdiction over the PROJECT. When approved by the OWNER, the schedule shall not be exceeded by the ENGINEER, except for cause.

If the ENGINEER becomes aware of delays due to time allowances for review and approval being exceeded, delay by the OWNER, the OWNER's consultants, or any other reason beyond the ENGINEER's control, which may result in the schedule of performance of the ENGINEER's services not being met, the ENGINEER shall promptly notify the OWNER. If the OWNER becomes aware of any delays or other causes that will affect the ENGINEER's schedule, the OWNER shall promptly notify the ENGINEER. In either event, the ENGINEER's schedule for performance of its services shall be equitably adjusted.

## **ARTICLE 7 - PAYMENT TO THE ENGINEER**

### **7.1 BASIC SERVICES**

The OWNER shall compensate the ENGINEER for services rendered pursuant to this Agreement, excepting those services described as Additional Services in Article 4 of this Agreement, by payment of the NOT TO EXCEED CEILING PRICE OF ONE HUNDRED EIGHTY-TWO THOUSAND THREE HUNDRED FIFTY AND NO/100 DOLLARS (\$182,350.00) for design services as described in Article 2. Additional services of the ENGINEER as described in Article 4, if any, shall be compensated on an hourly basis in accordance with Attachment 5.

### **7.2 REIMBURSABLE EXPENSES**

The scope of work for sub-contracted services is defined in the ENGINEER's scope of services, Attachment 1. The scope includes provisions for administration expenses for subcontracted services and reimbursable direct expenses including but not limited to laboratory tests and analyses; computer services; word processing services; permit fees, bonds, telephone, printing, binding and reproduction charges; and other similar costs. Indirect costs will have administrative fee reimbursements limited to no more than 5%. Direct costs are also limited to no more than 5% reimbursement.

Reimbursable expenses shall be limited during the term of this agreement as stated in Art. 7.1 Basic Services.

### **7.3 NOT TO EXCEED (NTE) CEILING PRICE**

*NTE Ceiling price.* The City of Huntsville (COH) will not be obligated to pay the ENGINEER any amount in excess of the NTE ceiling price as per Attachment "1" and the ENGINEER shall not be obligated to continue performance if to do so would exceed the NTE ceiling price set forth in the referenced attachment, unless and until the COH notifies the ENGINEER in writing that the NTE ceiling price has been increased and specifies in the notice a revised

NTE ceiling that shall constitute the NTE ceiling price for performance under this contract. NTE ceiling price increase will be done by a written unilateral change order to the contract issued by the OWNER that will not require the ENGINEER's approval. When and to the extent that the NTE ceiling price set forth in the referenced attachment has been increased, any hours expended and material costs incurred by the ENGINEER in excess of the NTE ceiling price before the increase shall be allowable to the same extent as if the hours expended and material costs had been incurred after the increase in the NTE ceiling price.

#### **7.4 EFFECTIVE DATE**

This contract shall have no force or effect unless and until it is executed by the OWNER and the ENGINEER and a properly executed copy is mailed to the ENGINEER with a notice to proceed (NTP). If a NTP is not issued within sixty (60) days commencing from the last date of execution of this CONTRACT by the OWNER and the ENGINEER, then this CONTRACT shall be NULL AND VOID, the OWNER will not be obligated to any payment to the ENGINEER and the ENGINEER will not be obligated to perform any work under said CONTRACT.

#### **PAYMENT SUMMARY**

Engineering Design Services – NOT TO EXCEED CEILING PRICE OF	\$182,350.00
<b>TOTAL CONTRACT AMOUNT:</b>	<b><u>\$182,350.00</u></b>

### **ARTICLE 8 - GENERAL PAYMENT PROCEDURE**

#### **8.1 INVOICES**

- 8.1.1** The ENGINEER shall submit monthly invoices to the Administrative Officer in the Engineering Department, for the basic services described under Articles 2 and 4 for the design of the PROJECT. Invoices must include the City of Huntsville project name and number, dates of services, contract amount, previous billings and current billing. Along with each invoice, the ENGINEER must submit a consultant progress report in the format shown in Attachment 6 hereto. No payment will be made without the consultant progress report completed and attached. Monthly progress reports shall be submitted monthly even if no request for payment is made. If services under Article 4 are included in the invoice for additional services not included under the lump sum provisions, or services billed as time and material, the classification and hours of such persons rendering the services shall be attached to the invoice.
- 8.1.2** The signature of the ENGINEER on the invoice shall constitute the ENGINEER's representation to the OWNER that the services indicated in the invoice have progressed to the level indicated, have been properly and timely performed as required herein, that the reimbursable expenses included in the invoice have been reasonably incurred, that all obligations of the ENGINEER covered by prior invoices have been paid in full, and that, to the best of the ENGINEER's knowledge, information and informed belief, the amount requested is currently due and owing, there being no reason known to the ENGINEER the payment of any portion thereof should be withheld. Submission of the ENGINEER's invoice for final payment and reimbursement shall further constitute the ENGINEER's representation to the OWNER that, upon receipt from the OWNER of the amount invoiced, all obligations of the ENGINEER to others, including its consultants, incurred in connection with the

PROJECT, have been paid in full. ENGINEER must designate on Attachment 6 – Progress Report in the appropriate space provided that such action has been completed.

## **8.2 TIME FOR PAYMENT**

The OWNER shall make payment for services in Articles 2 and 4 within 60 days of receipt of valid invoice.

## **8.3 OWNER'S RIGHT TO WITHHOLD PAYMENT**

In the event the OWNER becomes credibly informed that any representations of the ENGINEER, provided pursuant to Article 8.1.2, are wholly or partially inaccurate, the OWNER may withhold payment of sums then or in the future otherwise due to the ENGINEER until the inaccuracy, and the cause thereof, is corrected to the OWNER's reasonable satisfaction. Additionally, failure by the ENGINEER to supply substantiating records shall be reason to exclude related costs from the amounts which might otherwise be payable by the OWNER to the ENGINEER.

## **8.4 REIMBURSABLE EXPENSES**

**8.4.1** In addition to the requirements set forth in 8.1 above, invoices for reimbursable expenses shall include such documentation as the OWNER may require. Reasonable expenses are limited to the following expenses:

- (a) Transportation outside the immediate Huntsville area (50 mile radius) approved in advance by the OWNER in writing and incurred in connection with the PROJECT; (Per Department of Treasury, Internal Revenue Service Publication 1542, Per Diem Rates, for travel within the continental United States). Refer to website: [www.irs.gov/pub/irs-pdf/p1542.pdf](http://www.irs.gov/pub/irs-pdf/p1542.pdf) for more information.
- (b) Charges for long-distance communications;
- (c) Fees paid for securing approval of authorities having jurisdiction over the PROJECT,
- (d) Actual costs of reproduction for items in excess of those included in the required services;
- (e) Postage and handling charges incurred for drawings, specifications and other documents.

**8.4.2** The ENGINEER shall set forth with particularity on its invoice the nature and cost of the expense item being billed, and attach to its invoice the written authorization, if any, required for such item; and shall bill expenses at actual cost or prevailing rate and without the addition of administrative charge, any multiple or surcharge.

## **8.5 W-9 TAXPAYER FORM**

All ENGINEERING FIRMS are required to submit a Federal Tax Form W-9 to City of Huntsville at the time a contract is awarded. No payments of invoices can be made until this W-9 Tax Form has been properly submitted. A copy of the W-9 Tax Form can be requested from the OWNER or at the following website: [www.irs.ustreas.gov/pub/irs-pdf/fw9.pdf](http://www.irs.ustreas.gov/pub/irs-pdf/fw9.pdf)

## **ARTICLE 9 - GENERAL CONSIDERATIONS**

### **9.1 GENERAL**

OWNER and ENGINEER agree that the following sections and provisions shall apply to the work to be performed under this Agreement and that such provisions shall supersede any conflicting provisions of this Agreement.

### **9.2 SUB-CONTRACTED SPECIALIZED SERVICES**

The ENGINEER may sub-contract specialized services required of the PROJECT to competent and experienced sub-consultants approved by the OWNER in writing. As a prime professional, the ENGINEER shall act as OWNER's representative for contracting, directing, and managing the services of sub-consultants. The OWNER shall have the right to reject any consultant provided that the OWNER raises a timely objection. At the time of the execution of this Agreement, the parties anticipate that the consultants listed in Attachment "7" hereto will be retained by the ENGINEER to provide services with respect to the PROJECT. Expenses payable to the ENGINEER for subcontracted services are limited to no more than 5% of the cost of the subcontracted services

### **9.3 PEER REVIEW**

The OWNER reserves the right to conduct, at the OWNER's expense, peer review of designs and drawings prepared by the ENGINEER and/or sub-consultant(s) for the PROJECT. The ENGINEER and sub-consultant(s) agree that knowledge and consent to review of their work by other engineers of the OWNER's choosing is hereby given in accordance with the ADMINISTRATIVE CODE (RULES AND REGULATIONS) of the Alabama State Board of Licensure for Professional Engineers and Land Surveyors, Chapter 330-X-14-.06(a) (13) effective January 2008 and as may be amended now or in the future pertaining to the Code of Ethics for review of the work of another engineer.

### **9.4 CLARIFICATION OF WORK**

If reviewing agencies raise questions regarding the work of ENGINEER, OWNER will participate in such meetings as deemed necessary to explain and clarify this work.

### **9.5 CANCELLATION OF WORK**

This Agreement may be canceled by either party in the event of default or violation of any of the provisions of this Agreement by the other party, by written notice delivered to the address of record by registered mail giving ten (10) days advance notice of the intention to cancel. In the event of cancellation of this Agreement, ENGINEER shall be paid for all work performed to date of cancellation, less any loss, damage, or liability incurred by reason of default of ENGINEER and all records, data, parameters, design calculations and other information collected or obtained in the performance of this Agreement shall be delivered to OWNER.

### **9.6 CHANGES**

**9.6.1** The OWNER may, at any time by written order, make changes within the general scope of the Agreement in the services to be provided. If such changes cause an increase or decrease in ENGINEER's cost of, or time required for performance of any services, whether or not changed by any order, an equitable adjustment shall be made and the Agreement shall be modified in writing accordingly. Upon notification of change, ENGINEER must assert any claim of ENGINEER for adjustment in writing within 30 days from the date of receipt unless OWNER grants a further period of time.

**9.6.2** If findings in any phase of this PROJECT significantly alter the scope of work for subsequent phases, or if regulations are changed resulting in a scope of work change for any phase, engineering fees set forth in Article 7 may be renegotiated by the OWNER and ENGINEER.

## **9.7 ENGINEER'S RECORDS**

Documentation accurately reflecting services performed and the time expended by the ENGINEER and his personnel and records of reimbursable expenses shall be prepared concurrently with the performance of the services and shall be maintained by the ENGINEER. The ENGINEER shall maintain record copies of all written communications, and any memoranda of verbal communications related to the PROJECT. All such records and documentation shall be maintained for a minimum of five (5) years after the PROJECT date of final completion or for any longer period of time as may be required by law or good practice. If the ENGINEER receives notification of a dispute or of pending or commencement of litigation during this five-year period, the ENGINEER shall continue to maintain all PROJECT records until final resolution of the dispute or litigation. The ENGINEER shall make such records and documentation available to the OWNER upon notice and shall allow the authorized representative(s) of the OWNER to inspect, examine, review and copy the ENGINEER's records at the OWNER's reasonable expense.

## **9.8 USE AND OWNERSHIP OF DOCUMENTS**

All rights of ownership, copyrights, construction documents, including all drawings, specifications and other documents, electronic media, computer source code, or things prepared by or on behalf of the ENGINEER for the PROJECT are hereby transferred to the OWNER and shall be the sole property of the OWNER and are free of any retention rights of the ENGINEER. The ENGINEER hereby grants to the OWNER an unconditional right to use or to refer to, for any purpose whatsoever, the construction documents and any other documents or electronic media, computer source code prepared by or on behalf of the ENGINEER for the PROJECT, free of any copyright claims, trade secrets or other proprietary rights with respect to such documents. The ENGINEER shall be permitted to retain copies thereof for its records. The ENGINEER's documents and other work products are not intended or represented to be suitable for re-use by OWNER or others on extensions of the PROJECT or on any other PROJECT. Any re-use without specific written verification or adaptation by ENGINEER will be at OWNER's sole risk and without liability or legal exposure to ENGINEER, and OWNER shall indemnify and hold harmless ENGINEER from all claims, damages, losses and expenses including attorneys' fees arising out of, or resulting from, such reuse by the OWNER; provided however, that this agreement to indemnify and save harmless shall not apply to any reuse of documents retained by, or through, the ENGINEER.

## **9.9 ESTIMATE OF CONSTRUCTION COST**

Since ENGINEER has no control over the construction cost of labor, materials, or equipment, or over the construction contractor(s) methods of determining prices, or over competitive bidding or market conditions, his opinion of probable PROJECT cost or construction cost provided for herein are to be made on the basis of his experience and qualifications and represent his best judgment as a design professional familiar with the construction industry; but, ENGINEER cannot and does not guarantee that proposals, bids or construction costs will not vary from opinions of probable cost prepared by him. If OWNER wishes greater assurance as to the construction cost, he will employ an independent cost estimator.

#### **9.10 TERMINATION FOR CAUSE**

This Agreement may be terminated by either party upon seven (7) days written notice to the other should such other party fail substantially to perform in accordance with its material terms through no fault of the party initiating the termination.

#### **9.11 TERMINATION BY THE OWNER WITHOUT CAUSE**

The OWNER may terminate this Agreement without cause upon seven (7) days' written notice to the ENGINEER. In the event of such a termination without cause, the ENGINEER shall be compensated for all services performed prior to termination, together with Reimbursable Expenses incurred. In such event, the ENGINEER shall promptly submit to the OWNER its invoice for final payment and reimbursement which invoice shall comply with the provisions of Paragraph 8.1.

### **ARTICLE 10 - INDEMNITY AND INSURANCE**

#### **10.1 INSURANCE**

The ENGINEER shall carry insurance of the following kinds and amounts in addition to any other forms of insurance or bonds required under the terms of the contract specifications. The ENGINEER shall procure and maintain for the duration of the job until final acceptance by the OWNER, or as later indicated, insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the ENGINEER, his agents, representatives, employees or subcontractor.

#### **10.2 MINIMUM SCOPE OF INSURANCE:**

##### **A. General Liability:**

Insurance shall be written on an occurrence basis. Claims-made coverage will be accepted only on an exception basis after the OWNER's approval. The same insurance company should write General Liability Coverage and OWNERs ENGINEERs Protective Insurance.

##### **B. Commercial General Liability**

Products and Completed Operations  
Contractual  
Personal Injury  
Explosion, Collapse and Underground  
Broad Form Property Damage

##### **C. Professional Liability:**

Insurance may be written on a "claims-made" basis, providing coverage for negligent acts, errors or omissions in the performance of professional services. Coverage shall be maintained for a discovery and reporting period of no less than five (5) years after completion of the professional services and Certificates of Insurance shall be submitted to the OWNER on a yearly basis during this time frame. Coverage shall be no less comprehensive than that which is carried by at least 25% of the registered engineers or engineering firms contracting in the State of Alabama. Such coverage shall be carried on a continuous basis including prior acts coverage to cover the subject PROJECT. The professional liability insurance shall contain contractual liability coverage.

**D. Automobile Liability:**

Business Automobile Liability providing coverage for all owned, hired and non-owned autos. Coverage for loading and unloading shall be provided under either automobile liability or general liability policy forms.

**E. Workers' Compensation Insurance:**

Statutory protection against bodily injury, sickness or disease or death sustained by employee in the scope of employment. Protection shall be provided by a commercial insurance company or a recognized self-insurance fund authorized before the State of Alabama Industrial Board of Relations. "Waivers of Subrogation" in favor of the OWNER shall be endorsed to Workers' Compensation Insurance.

**F. Employers Liability Insurance:**

Covering common law claims of injured employees made in lieu of or in addition to a worker's compensation claim.

**10.3 MINIMUM LIMITS OF INSURANCE:**

**A. General Liability:**

Commercial General Liability on an "occurrence form" for bodily injury and property damage:

\$ 2,000,000 General Aggregate Limit  
\$ 2,000,000 Products - Completed Operations Aggregate  
\$ 1,000,000 Personal & Advertising Injury  
\$ 1,000,000 Each Occurrence

**B. Professional Liability:**

Insurance may be made on a "claims-made" basis:

\$ 500,000 Per Claim - Land Surveyors  
\$ 1,000,000 Per Claim - Other Professionals

**C. Automobile Liability:**

\$ 1,000,000 Combined Single Limit per accident for bodily injury and property damage.

**D. Workers' Compensation:**

As required by the State of Alabama Statute

**E. Employers Liability:**

\$ 1,000,000 Bodily Injury by Accident or Disease  
\$ 1,000,000 Policy Limit by Disease

#### **10.4 OTHER INSURANCE PROVISIONS:**

The OWNER is hereby authorized to adjust the requirements set forth in this document in the event it is determined that such adjustment is in the OWNER's best interest. If the insurance requirements are not adjusted by the OWNER prior to the OWNER's release of specifications with regard to the PROJECT in question, then the minimum limits shall apply. The City of Huntsville/OWNER shall be named on the policies of general liability and automobile insurance and on the certificate of insurance as an Additional Insured. Additional Insured status on the Commercial General Liability policy shall be through ISO Additional Endorsement CG 20 10 11 85 or equivalent and coverage shall be afforded on a primary basis.

The policies are to contain, or be endorsed to contain, the following provisions:

##### **A. All Coverage:**

The ENGINEER is responsible to pay all deductibles. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, canceled, non-renewal or materially changed by either party, reduced in coverage or in limits except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to the OWNER. Cancellation of coverage for non-payment of premium will require ten (10) days written notice to the OWNER.

#### **10.5 ACCEPTABILITY OF INSURERS:**

Insurance is to be placed with insurers authorized by the State of Alabama with an A. M. Best rating of A-V or better.

#### **10.6 VERIFICATION OF COVERAGE:**

The OWNER shall be indicated as a Certificate Holder and the ENGINEER shall furnish the OWNER with Certificates of Insurance reflecting the coverage required by this document. The A. M. Best rating and deductibles, if applicable, shall be indicated on the Certificate of Insurance for each insurance policy. The certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf and must be an original signature. Certificates signed using digital signatures will not be accepted. All certificates are to be received and approved by the OWNER before work commences. The OWNER reserves the right to require complete, certified copies of all required insurance policies at any time.

#### **10.7 CONSULTANTS AND/OR SUBCONTRACTORS WORKING FOR THE ENGINEER:**

The ENGINEER shall furnish separate certificates and/or endorsements for each subcontractor and/or consultant showing insurance of the same type or types and to the extent of the coverage set forth in this Article 10.

#### **10.8 HOLD HARMLESS AGREEMENT:**

##### **A. Other Than Professional Liability Exposures:**

The ENGINEER, to the fullest extent permitted by law, shall indemnify and hold harmless the OWNER, its elected and appointed officials, employees, agents, and representatives against all claims, damages, losses and expenses, including, but not limited to, attorney's fees, arising out of or resulting from the performance of the work, provided that any such claim, damage, loss or expense (1) is attributable to

personal injury, including bodily injury sickness, disease or death, or to injury to or destruction of tangible property, including loss of use resulting there from, and (2) is caused by any negligent act or omission of the ENGINEER or any of their consultants, or anyone directly or indirectly employed by them or anyone for whose acts they are legally liable. Such obligation should not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity, which would otherwise exist as to any party or person, described in this paragraph.

**B. Professional Liability:**

The ENGINEER agrees, to the fullest extent permitted by law, to defend, protect, indemnify and hold harmless the OWNER, its elected and appointed officials, officers, directors, employees, agents, and representatives from and against any and all liability, claims, demands, damages, loss, costs, fees, and expenses (including actual fees and expenses of attorneys, expert witnesses, and other consultants) actually or allegedly arising out of, or resulting from, the professional services of the ENGINEER or the ENGINEER's consultants, subcontractors, or suppliers, including, without limitation, any breach of contract or any negligent acts, errors, or omissions in the performance of the professional services provided pursuant to or as a result of this Agreement. Neither, the OWNER nor the ENGINEER shall be obligated to indemnify the other party in any manner whatsoever for the other parties own negligence.

To the fullest extent permitted by law, the ENGINEER shall defend, protect, indemnify, and hold harmless the OWNER, its elected and appointed officials, officers, directors, employees, agents, and representatives from and against any and all liability, claims, demands, damages, loss, costs, fees and expenses (including actual fees and expenses of attorneys, expert witnesses, and other consultants) for infringement of patent rights, copyrights, or other intellectual property rights, except with respect to designs, processes or products of a particular manufacturer expressly required by the OWNER in writing. If the ENGINEER has reason to believe the use of a required design, process or product is an infringement of a patent, the ENGINEER shall be responsible for such loss unless such information is promptly given to the OWNER.

## **ARTICLE 11- MISCELLANEOUS PROVISIONS**

### **11.1 GOVERNING LAW**

This Agreement shall be governed by the law of the State of Alabama.

### **11.2 INTENT AND INTERPRETATION**

**11.2.1** The intent of this contract is to require complete, correct and timely execution of the work. Any work that may be required, implied or inferred by the contract documents, or any one or more of them, as necessary to produce the intended result shall be provided by the ENGINEER.

**11.2.2** This contract is intended to be an integral whole and shall be interpreted as internally consistent. What is required by any one contract document shall be considered as required by the contract.

**11.2.3** When a word, term or phrase is used in this contract, it shall be interpreted or construed, first, as defined herein; second, if not defined, according to its generally

accepted meaning in the engineering industry; and third, if there is no generally accepted meaning in the engineering industry, according to its common and customary usage.

**11.2.4** The words "include", "includes", or "including", as used in this contract, shall be deemed to be followed by the phrase, "without limitation".

**11.2.5** The specification herein of any act, failure, refusal, omission, event, occurrence or condition as constituting a material breach of this contract shall not imply that any other, non-specified act, failure, refusal, omission, event, occurrence or condition shall be deemed not to constitute a material breach of this contract.

**11.2.6** Words or terms used as nouns in this contract shall be inclusive of their singular and plural forms, unless the context of their usage clearly requires a contrary meaning.

### **11.3 TIME IS OF THE ESSENCE**

Time limitations contained herein, or provided for hereby, are of the essence of this Agreement. The ENGINEER understands and acknowledges that time is of the essence in completion of the PROJECT and that the OWNER will incur damages if the PROJECT is not completed on time.

### **11.4 SUCCESSORS AND ASSIGNS**

The ENGINEER shall not assign its rights hereunder, excepting its right to payment, nor shall it delegate any of its duties hereunder without the written consent of the OWNER. Subject to the provisions of the immediately preceding sentence, the OWNER and the ENGINEER, respectively, bind themselves, their successors, assigns and legal representatives to the other party to this Agreement and to the successors, assigns and legal representatives of such other party with respect to all covenants of this Agreement. Nothing herein shall be construed as creating any personal liability on the part of any officer or agent of any public body that may be party hereof, nor shall it be construed as giving any rights or benefits hereunder to anyone other than OWNER and ENGINEER.

### **11.5 NO THIRD-PARTY BENEFICIARIES**

This Agreement shall inure solely to the benefit of the parties hereto and their successors and assigns. Nothing contained herein is intended to or shall create a contractual relationship with, or any rights in favor of, or any cause of action in favor of, any third party, against the OWNER or the ENGINEER.

### **11.6 INTELLECTUAL PROPERTY/ CONFIDENTIALITY**

All information, documents, and electronic media, computer source code furnished by the OWNER to the ENGINEER belong to the OWNER, are considered proprietary and confidential, unless otherwise indicated by the OWNER, and are furnished solely for use on the OWNER's PROJECT. Such information, documents, and electronic media, computer source code shall be kept confidential by the ENGINEER, shall only be released as necessary to meet official regulatory requirements in connection with the PROJECT, and shall not be used by the ENGINEER on any other PROJECT or in connection with any other person or entity, unless disclosure or use thereof in connection with any matter other than services rendered to the OWNER hereunder is specifically authorized in writing by the OWNER in advance. This Section 11.6 shall survive the expiration of this Agreement.

## **11.7 SUBCONTRACT REQUIREMENTS**

The ENGINEER shall include the terms and conditions of this Agreement in every subcontract or agreement with a consultant for this PROJECT so that these terms and conditions shall be binding upon each subcontractor or consultant. The subcontractor(s)/consultant(s) will maintain all licenses and certifications to practice its profession or trade by all public entities having jurisdiction over the PROJECT. The subcontractor (s)/consultant(s) further represent to the OWNER that the subcontractor(s)/consultant(s) will maintain all necessary licenses, certifications, permits or other authorizations necessary for the PROJECT until the remaining duties hereunder have been satisfied.

## **11.8 NOTICES**

Unless otherwise provided, all notices shall be in writing and considered duly given if the original is hand delivered; if delivered by facsimile to 256-427-5325, or is sent by U.S. Mail, postage prepaid to City of Huntsville Engineering, P. O. Box 308 (35804), 320 Fountain Circle (35801), Huntsville, AL. All notices shall be given to the addresses set forth above. Notices, hand delivered or delivered by facsimile, shall be deemed given the next business day following the date of delivery. Notices given by U.S. Mail shall be deemed given as of the second business day following the date of posting.

## **11.9 STRICT COMPLIANCE**

No failure of the OWNER to insist upon strict compliance by the ENGINEER with any provision of this Contract for Professional Services shall operate to release, waive, discharge, modify, change or affect any of the ENGINEER's obligations.

## **11.10 WAIVER**

No provision of this Agreement may be waived except by written agreement of the parties. A waiver of any provision on one occasion shall not be deemed a waiver of that provision on any subsequent occasion, unless specifically stated in writing. A waiver of any provision shall not affect or alter the remaining provisions of this Agreement.

## **11.11 SEVERABILITY**

If any provision of this Agreement, or the application thereof, is determined to be invalid or unenforceable, the remainder of that provision and all other provisions of this Agreement shall remain valid and enforceable.

## **11.12 ETHICS**

The ENGINEER shall not offer or accept any bribes or kickbacks from or to any manufacturer, consultant, trade contractor, subcontractor, supplier or any other individual or entity in connection with the PROJECT. The ENGINEER shall not confer on any governmental, public or quasi-public official having any authority or influence over the PROJECT any payment, loan, subscription, advance, deposit of money, services or anything of more than nominal value, present or promised. The ENGINEER shall not, without the express written permission of the OWNER, engage or recommend to the OWNER engagement of any consultant, trade contractor, subcontractor, or supplier to provide services on behalf of the ENGINEER, OWNER or PROJECT in which the ENGINEER has a direct or indirect proprietary or other pecuniary interest; or call for the use of or by exclusion require or recommend the use of products, materials, equipment, systems, processes or procedures in which the ENGINEER or in which any consultant, trade contractor, subcontractor, or supplier of the ENGINEER has a direct or indirect proprietary or other

pecuniary interest. Without prior notification and written approval of the OWNER, the ENGINEER and the ENGINEER'S subconsultants shall not offer services to the OWNER'S contractor.

**11.13 E-VERIFY – NOTICE**

The ENGINEER shall enroll, and shall remain enrolled for the duration of this contract, in a designated employment eligibility verification system (E-Verify) in accordance with the City of Huntsville Ordinance 09-735. If the ENGINEER uses subcontractors in connection with the performance of work herein and the value of the subcontract exceeds \$3,000, the subcontractor shall also comply with this ordinance. The ENGINEER shall include specific written notice in all requests for bids or proposals prepared by the ENGINEER that contractors and any subcontractors are required to enroll in the E-verify program as required by the ordinance. Failure to comply with the requirements of the ordinance shall be a material breach of the contract.

As a condition of this agreement, pursuant to 8 U.S.C. §1324a, AMEC Environment and Infrastructure, Inc. hereby certifies that it has not knowingly employed, recruited, referred for a fee, or contracted with an unauthorized alien, with respect to employment in the United States. Further, AMEC Environment and Infrastructure, Inc. hereby certifies that it has enrolled in the City of Huntsville designated employment eligibility verification system in accordance with Ordinance 09-735 and will maintain enrollment throughout the term of this contract.

Arcadis U. S., Inc.  
(Company)

BY:  
(Authorized Representative)

**11.14 ENTIRE AGREEMENT**

This Agreement represents the entire agreement between the OWNER and the ENGINEER and supersedes all prior communications, negotiations, representations or agreements, either written or oral. This agreement may be amended only by written instrument signed by both OWNER and ENGINEER.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement the day and year first above written.

**OWNER:  
CITY OF HUNTSVILLE**

**ENGINEER:  
ARCADIS U. S., INC.**

BY: \_\_\_\_\_  
Tommy Battle

BY: \_\_\_\_\_  
Jerry D. Jones

TITLE: \_\_\_\_\_  
Mayor

TITLE: \_\_\_\_\_  
Vice President

ATTEST: \_\_\_\_\_

ATTEST: \_\_\_\_\_

Given under my hand this \_\_\_\_\_ day

Given under my hand this \_\_\_\_\_ day

Of \_\_\_\_\_, 2013.

Of \_\_\_\_\_, 2013.

\_\_\_\_\_  
Notary Public

\_\_\_\_\_  
Notary Public

My commission expires \_\_\_\_\_

My commission expires \_\_\_\_\_

**ATTACHMENT 1-SCOPE OF SERVICES**

**(Refer to letter dated April 9, 2013, from Jerry D. Jones to Ben Ferrill and attachments).**



ARCADIS U.S., Inc.  
2170 Highland Avenue  
Suite 250  
Birmingham  
Alabama 35205  
Tel 205 930 5700  
Fax 205 930 5707  
[www.arcadis-us.com](http://www.arcadis-us.com)

*HIA*  
*ku*  
Dr. Benjamin Ferrill, Ph.D.  
City Planner  
City of Huntsville, Alabama  
308 Fountain Circle  
Huntsville, Alabama 35801

Subject: Dallas Branch/Pinhook Creek Phase I Hazard Mitigation Grant Program  
Application Completion and Finalization of Design Plans Proposal

Water Division

Dear Dr. Ferrill:

As you are aware, the Hazard Mitigation Grant Program (HMGP) DR 1605-0217 Dallas Branch/Pinhook Creek Flood Control Project was authorized by FEMA on June 20, 2008 in the amount of \$992,040 with a Federal share of \$744,030. The project entailed the study and research required to determine eligibility under HMGP criterion for a Phase II construction of the Dallas Branch and Pinhook Creek Flood Mitigation Project. FEMA set aside \$7,982,319 representing the approximate Federal share of the total Phase II project construction cost (based upon preliminary estimates developed under the original HMGP application in May 2006).

Date:  
April 9, 2013

Contact:  
Jerry D. Jones

Phone:  
205.930.5700

### Project History

Email:  
[jerry.jones@arcadis-us.com](mailto:jerry.jones@arcadis-us.com)

The City of Huntsville was tasked by FEMA to conduct the hydrology and hydraulics, geotechnical and structural, and real estate studies and research necessary to arrive at a design plan for the project, develop cost estimates and perform a benefit-cost analysis.

Prior to the project kick-off, FEMA required that the engineering design level for the initial phase be less than one-million dollars and thus our teamed scoped and executed an approximately 90% design which did not include completion of the Environmental Assessment (EA). The original costs estimate for the Phase I study to develop a 100% design was \$1,490,000 in October 2006. Following numerous requests for information and subsequent responses by the City, FEMA requested the City update the Phase I cost estimate in May 2008.

The City of Huntsville prepared and delivered the following project studies to FEMA:

- Updated Hydrology and Hydraulics Study
- 90% Project Designs
- Detailed Construction Budget
- Flood Damage Reduction Benefits
- Updated Benefit Cost Analysis
- Draft Environmental Assessment and;
- Hazardous, Toxic and Radioactive Waste (HTRW) Investigations

Imagine the result



### Updated Hydrology and Hydraulics Study

To complete the update of the Hydrology and Hydraulics Study a survey and field investigations were completed. This task also supported the development of the 90% design drawings.

A physical description of the study area was prepared for the purposes of defining the limits of needed GIS data. The City provided digital files including, but not limited to, the following data:

- City of Huntsville base mapping (roads, buildings, etc.).
- Effective FIS floodplain and floodway mapping.
- 2-ft and 5-ft interval contour lines.
- Source data (points and breaklines) for the 2-ft interval contour lines.
- Municipal infrastructure (stormwater, water, sewer, gas, electric, etc.).
- Orthophotographs.

Along with field surveys, the information above was used to develop the base mapping that was used throughout this project.

During the initial phases of the application process, correlations between the HEC-RAS & FDA models were established. As required by FEMA, additional efforts were needed to continue to refine the HEC-RAS outputs and to format them for input into the Corps FDA model as well as FEMA's Limited Data module. This scope of work included refining the HEC-RAS & FDA models to evaluate the most current project design.

Existing (pre-project) and future (project) condition hydraulic models were developed to determine water surface elevations and design discharges along Dallas Branch, the Dallas Branch By-pass, and Pinhook Creek for the 2-, 5-, 10-, 25-, 50-, 100-, 250-, and 500-yr frequency events.

The proposed project was also analyzed for scour potential. The scour analyses utilized the methods outlined in Hydraulic Engineering Circular No. 18 (FHWA, 2001) and/or methods required by the Alabama Department of Transportation (ALDOT) and included the computation of pier scour, abutment scour and contraction scour.

A Hydrology and Hydraulics Report was prepared to describe the final post-project hydrology and hydraulic parameter development, model development, model results, and floodplain and floodway mapping. A section of the report also summarizes the scour analyses and results.

Geotechnical evaluations were conducted with the aim of defining the general subsurface conditions at the site as well as site specific conditions (i.e. geologic setting, potential geologic hazards, existing bridge pier foundations, etc.) that could influence the design and construction of the proposed flood control measures. The purpose of the geotechnical investigations was to develop data to characterize the subsurface conditions in the project areas and to provide opinions and recommendations with regard to the geotechnical engineering aspects of the proposed construction. Upon complete of field and laboratory work, the data was analyzed and a geotechnical report was developed and submitted to the City Staff and FEMA/AEMA.

Imagine the result



Dr. Benjamin Ferrill

April 9, 2013

The elements of the design information for the construction plans include 90% design drawings for:

- Culvert Improvement Details
- Channel Improvement Details
- Storage Basin Configuration

The 90% drawings included the proposed crossing under the Norfolk Southern (NS) rail line in the vicinity of the proposed Dallas Branch detention facility; the project areas that will affect the ROW for I-565; and, the project areas and design features along Dallas Branch and Pinhook Creek that are deemed outside the areas of concern for ALDOT and NS.

The design elements along Dallas Branch/Pinhook Creek included the following design elements.

- A high-flow diversion channel along Pinhook Creek in the vicinity of the I-565 intersection with Memorial Parkway.
- Channel excavation along Pinhook Creek from the proposed high-flow diversion channel upstream to its confluence with Dallas Branch.
- Channel excavation along Dallas Branch from its confluence with Pinhook Creek upstream to the NS railroad crossing.
- Additional culverts at the Washington Street crossing on Dallas Branch.
- An overflow bypass culvert at the Meridian street crossing on Dallas Branch
- An in-line detention basin upstream of the NS crossing on Dallas Branch. A new culvert crossing under the NS rail line will be added to drain the detention facility.
- Channel excavation along Dallas Branch from the I-565 crossing over Dallas Branch upstream to the crossing at Coleman Street. Structural design components in this reach include additional culverts for the stream crossings at Dement Street, Andrew Jackson Way, and Russell Street.

#### Detailed Budget

That scope of work included re-assessing the value of properties in the project area.

Based upon the results obtained from the development of the Project Scope of Work, Malcolm Pirnie/Arcadis (AUS) developed a detailed project construction cost estimate. This estimate included geotechnical, structural, and other engineering elements necessary to construct the proposed project. This estimate also included real estate along with rough order of magnitude (ROM) utility relocation costs.

In support of design services and economic analyses, the following real estate information was produced:

- Identification of parcels to be purchased in their entirety and parcels which will require easement acquisition or right-of-way purchase.
- Research of real estate records for parcels to address easement acquisition or right-of-way purchase.

#### Flood Damage Reduction Benefits

FEMA indicated that the Pinhook Creek HMGP needed to account for additional damages that could be anticipated by flooding events. Specifically, FEMA indicated that the City should account for damages associated with traffic disruptions during flooding events. Therefore AUS evaluated and assessed the impacts of traffic disruptions during flooding events and computing the economic damages associated with those disruptions.



Dr. Benjamin Ferrill  
April 9, 2013

Based upon the updated project hydraulics, real estate values, traffic disruptions, depth damage curves, and other benefits for the proposed project, new runs of the FDA model were developed to evaluate the benefits of the proposed plan.

After the development of the project construction costs, an updated Benefit Cost Analysis (BCA) was prepared that documents the overall economic benefits of the proposed project.

### Environmental Assessment and Results

AUS evaluated the potential environmental impacts of project alternatives as required by the National Environmental Policy Act (NEPA) and developed a Draft Environmental Assessment for ultimate approval by FEMA.

In general the efforts included the evaluation of:

1. Potential impacts to wetlands
2. Threatened and endangered species
3. Water quality
4. Hazardous materials
5. Cultural Resources
6. Environmental Justice

A Draft Environmental Assessment (EA) was developed and coordinated with the appropriate local, state, and federal agencies. The final coordinated draft EA was turned over to FEMA for their completion/execution.

### **Remaining Efforts Requested by FEMA for Approval of the Project**

A letter addressed to the Alabama Emergency Management Agency from Clayton E. Saucier, Chief of the Hazard Mitigation Assistance Branch, on December 22, 2011, grants the City of Huntsville a Phase I extension to address some items of concern for this project. This correspondence indicated that the following documents must be completed and submitted to FEMA's Region IV Mitigation Branch to complete the analysis of the Dallas Branch/Pinhook Creek Phase I design in order to obtain approval and funding for the construction project:

1. A final scope of work.
2. A final project design plan.
3. A final project cost estimate.
4. Letters from the Alabama Department of Transportation and Norfolk Southern Railroad approving the final project design plan.
5. A listing of all real property and easements proposed for acquisition including:
  - a. Type of real estate.
  - b. Occupancy status (vacant, owner-occupied, renter occupied)
  - c. The names and addresses of property owners.
6. A listing of properties which will not (or are not likely to) be acquired in a voluntary action.
7. An updated Benefit Cost Analysis based on the 100% design.
8. A Draft Environmental Assessment and draft public notice written in accordance with the National Environmental Policy Act, Council on Environmental Quality regulations, 44CFR Part 10.9, and FEMA environmental assessment guidelines.

Further, FEMA authorized an extension of the planning, design, and permitting phase of the project until December 30, 2013.



Dr. Benjamin Ferrill  
April 9, 2013

## **Necessary Works Efforts to Complete Project**

Following is the scope of work necessary to complete the planning, design, and permitting phase of the project that will ultimately lead to funding for construction of the project.

### **Task 1 – Overall Project Management**

#### 1.1. Initial Meetings

##### Initial Meetings

In order to meet the project schedule and ensure that the project requirements are clearly defined and documented, AUS will schedule (in coordination with AMEC) meetings with

- ALDOT and NFS to discuss plans/requirements for completing the necessary designs in order to obtain permits for the project

Upon completion of this effort, AUS will setup a meeting with City Staff to:

1. Outline steps including responsibilities for finalizing this phase of the project.
2. Review and update project schedule.
3. Access risk of obtaining permits (above)

Immediately following this meeting, AUS will compile information obtained during the meetings above and document issues and concerns raised. This information will then be shared with City Staff to ensure that risk associated with project completion relative to this scope of work is qualified.

#### 1.2 Ongoing project meetings

In support of the ongoing effort, project team meetings will be required to ensure that all team members are continually informed of all recent and ongoing project activities. To facilitate this awareness, AUS will hold bi-weekly (or as needed) meetings by conference call with the project team. Once meetings are complete, meeting notes will be drafted and distributed to project team members for review and approval.

Throughout the remainder of this project, we anticipate conference calls between the City, AMEC, ALDOT, and NSR. These meetings will be necessary to ensure that the organizations are kept abreast of the design activities and are in agreement with the final designs being developed. As part of this scope of work AUS will continue supporting the City through these meetings.

### **Task 2 – Completion of Project Drawings and Specifications**

This task will use the results of the previous project efforts to prepare final drawings and bid documents to facilitate the construction contracting process to implement the proposed improvements for construction after the HMGP application is approved.

#### 2.1 Completion of Channel Modification Drawings

Design of the channel excavation along Pinhook Creek from the proposed high-flow diversion channel upstream to its confluence with Dallas Branch will be completed to include: 1) the tie in for the bridge replacement projects for crossings at Church Street and Pratt Street; 2) the crossing at Meridian Street; 3) additional culverts at the Washington Street crossing and retaining walls, if necessary; and, 4) additional culverts for the stream crossings at Dement Street, Andrew Jackson Way, and Russell Street and retaining walls, if necessary. The City will provide (or have provided by others) design plans to AUS for

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those crossings/areas designed under separate contract so that match lines can be developed. Similarly, AUS will provide design plans prepared under this contract as needed so that match lines can be developed and hydraulic analysis can be done.

## 2.2 Completion of Utility Drawings

The identification and design of utility features that might require relocation and/or modification to facilitate the proposed construction project will be completed.

AUS will assist the City and Huntsville Utilities in developing the necessary drawings (and associated cost estimates) for the relocation and modification to the affected storm drainage system and to the sanitary sewer lines that are identified by the City.

## 2.3 Project Specifications

The Owner will provide standard construction specifications. Those standard specifications, details, and drawings that do not include all the necessary information needed in the design effort will be supplemented as necessary by AUS to provide final, bid ready, design packages for construction.

## 2.4 Plan Integration and Consolidation

It is the understanding of AUS that AMEC will be retained by the City under separate contract to develop drawings and specifications for the detention basin and stream channel railroad crossing associated with this project as well as perform the needed hydraulic analyses. These additional plans and specifications will have to be integrated and consolidated into one complete set of construction documents. AUS will take the lead in this integration process.

## 2.5 Property Acquisition Plans

AUS will prepare detailed property acquisition drawings including deed ready legal descriptions based on field survey for properties where complete acquisition is not necessary. This will allow for a more accurate estimation of total project costs. It is presently anticipated that this represents 20 properties. AUS will collect and summarize deeds on the remaining properties necessary to construct the consolidated project.

## **Task 3 – Updates to the Project Cost Estimate**

### 3.1 Update Real Estate Costs

Since the last phase was completed and the application was submitted Real Estate values in the project area may have varied. This scope of work includes a quick re-assessment of the value of properties in the consolidated project area.

### 3.2 Calculation of Quantities

The quantities of all necessary labor and materials associated with the construction of the plans developed for this consolidated project will be calculated and tabulated to be used in cost estimating and for the necessary bid packages.

### 3.3 Update Project Cost Estimates

Based upon the results obtain from Task 2, AUS (with AMEC's support) will develop a detailed consolidated project construction cost estimate. This estimate will include geotechnical, structural, and other engineering elements necessary to construct the proposed project. This estimate will also include real estate along with likely utility relocation costs.



#### **Task 4 – Updates to the Benefit Cost Analysis**

##### **4.1 Run updated Flood Damage Assessment Model**

Based upon the updated hydraulic analysis, real estate values, and benefits for the proposed consolidated project, new runs of the FDA model will be developed to evaluate the benefits of the completed design plan.

##### **4.2 Update the Benefit Cost Analysis**

Once the project construction costs are developed, an updated BCA will be prepared that documents the overall economic benefits of the proposed project.

#### **Task 5 – NEPA Completion**

AUS will update the existing Draft Environmental Assessment and coordinate with FEMA to ensure sufficiency of the material that will result in the development and signing of Findings of No Significant Impact (FONSI) by FEMA.

#### **Task 6 – Permit Applications for ALDOT & Norfolk Southern**

AUS will support the City and AMEC in developing permit applications for both ALDOT & NS, respectively. AUS will work with AMEC to address requests for information from ALDOT and NS through the permitting process as well as prepare for meeting presentations.

#### **Task 7 – Finalize HMGP Submittal for Construction Approval**

Based on the above mentioned tasks, AUS will prepare the final HMGP application for FEMA and AEMA approval. This HMGP application will include the following:

1. A final scope of work.
2. A final project design plan.
3. A final project construction cost estimate.
4. Letters from the ALDOT and NSR approving the final project design plan.
5. A listing of all real property and easements proposed for acquisition including:
  - a. Type of real estate.
  - b. Occupancy status (vacant, owner-occupied, renter occupied)
  - c. The names and addresses of property owners.
6. A listing of properties which will not be acquired in a voluntary action.
7. An updated Benefit Cost Analysis based on the 100% cost estimate.
8. A Draft Environmental Assessment and draft public notice written in accordance with the National Environmental Policy Act, Council on Environmental Quality regulations, 44CFR Part 10.9, and FEMA environmental assessment guidelines.

#### **SUMMARY OF DELIVERABLES**

1. AUS will deliver two (2) hard copies of the completed draft HMGP Report to City for review and comment. AUS will make up to 2 subsequent revisions as necessary and appropriate.
2. AUS will deliver four (6) hard copies of the final HMGP Report to City. The final HMGP Report will also be provided to City as a digital color Adobe Acrobat (PDF) file on CD including permits from ALDOT & NS.

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3. AUS will deliver 100% design drawings for the channel modifications portion of the project including, ROW drawings, construction quantity tables, and specifications. AUS will coordinate with AMEC to create a consolidated integrated set of construction drawings to include the detention basin and the railroad crossing.
4. AUS (with AMEC's support) will deliver ALDOT permit application to the City for approval and submission and provide ongoing support with both ALDOT and NS requests until permits are obtained.

### PROJECT SCHEDULE AND BUDGET

The time for completion of the scope of work for Phase I extension described above is 7 months from the notice to proceed on a time and materials basis not to exceed **\$182,350** without prior authorization from the City.

We appreciate the opportunity to submit this proposal to the City to complete this very important project. If you should have any questions or require further information, please do not hesitate to contact me at 205.396.6350. We appreciate the opportunity to continue serving the City of Huntsville.

Sincerely,  
ARCADIS U.S., Inc.

A handwritten signature in blue ink, appearing to read "J. D. Jones", with a long horizontal line extending to the right.

Jerry D. Jones  
Vice-President

**Dallas Branch Pinhook Creek Fee Estimate**

City of Huntsville, Alabama  
 Fee Estimate  
 Project - Dallas Branch/Pinhook Creek

ARCADIS US, INC.												Total Labor Hrs	Total Labor Fee
WR Principal	Senior WR Project Manager	WR Senior Engineer	WR Project Engineer	CADD Operator	PLS	Survey Chief	Survey Tech	Garrett Unit 1	Convoys Unit 1				
\$255	\$178	\$149	\$144	\$40	\$120	\$70	\$80						
<b>Task 1 Project Management</b>													\$6,188.00
<b>Task 1.1 Initial Meetings</b>													\$1,000.00
	14	14										14	\$3,454.00
	8	8										8	\$2,568.00
	8	8										8	\$2,568.00
<b>Task 1.2 Ongoing Meetings</b>													\$5,188.00
	48	82										130	\$3,720.00
	8	28										36	\$1,024.00
		7										7	\$1,246.00
		4										4	\$712.00
		11										11	\$1,958.00
	40	6										46	\$1,286.00
		8										8	\$2,250.00
<b>Task 2 Design Plans</b>													\$61,902.00
<b>Task 2.1 Channel Modification Plans</b>													\$48,412.00
			38	82								120	\$3,454.00
			12	40								52	\$1,548.00
			8	24								32	\$968.00
			16	16								32	\$968.00
				12								12	\$372.00
<b>Task 2.2 Utility Plans</b>													\$23,490.00
			80	100								180	\$5,188.00
			40	60								100	\$2,854.00
			20	20								40	\$1,140.00
<b>Task 2.3 Project Specifications</b>													\$8,456.00
		8	24	24								56	\$1,656.00
		8	24	24								56	\$1,656.00
<b>Task 2.4 Plan Integration and Consolidation</b>													\$9,672.00
			38	38								76	\$2,250.00
			4	4								8	\$236.00
			16	24								40	\$1,140.00
			16	8								24	\$712.00
<b>Task 2.4 Property Acquisition Plans</b>													\$5,750.00
			48	40	68	36	64	64				212	\$6,188.00
				40								40	\$1,140.00
<b>Task 3 Update to Project Cost Estimate</b>													\$13,748.00
<b>Task 3.1 Revise Billing Costs</b>													\$8,000.00
			4	4								8	\$2,250.00
<b>Task 3.2 Quantities</b>													\$5,748.00
			32	32								64	\$1,854.00
			32	32								64	\$1,854.00
<b>Task 3.3 Project Cost Estimate</b>													\$2,380.00
			18	18								36	\$1,024.00
			18	18								36	\$1,024.00
<b>Task 4 Update to BCA</b>													\$11,736.00
<b>Task 4.1 Perform Updates to PDA Model Calculations</b>													\$4,132.00
			20	8								28	\$812.00
			20	32								52	\$1,548.00
			20	32								52	\$1,548.00
<b>Task 4.3 Update BCA Model</b>													\$7,568.00
			20	32								52	\$1,548.00
<b>Task 5 Permit Applications</b>													\$18,688.00
<b>Task 5.1 Coordination with FEMA Staff</b>													\$3,318.00
			18	18								36	\$1,024.00
			8	8								16	\$454.00
			8	8								16	\$454.00
<b>Task 5.2 Permit Applications for ALDOT and NSR</b>													\$4,278.00
			12	12								24	\$688.00
			12	12								24	\$688.00
<b>Task 5.3 Finalize PERMITS</b>													\$7,120.00
			48	40								88	\$2,568.00
			40	40								80	\$2,250.00
<b>Task 6 Permit Applications for ALDOT and NSR</b>													\$4,278.00
			12	12								24	\$688.00
			12	12								24	\$688.00
<b>Task 7 Finalize HSDP Submittal</b>													\$17,368.00
	14	78										92	\$2,654.00
	4	20										24	\$688.00
	2	4										6	\$1,722.00
		20										20	\$568.00
		8										8	\$226.00
		8										8	\$226.00
		24										24	\$688.00
		78	258	348	68	36	64	64	8	6,000	7,000	908	\$26,972.00
<b>Expenses</b>													
	\$388.00	1050	miles										
	\$1,200.00												
	\$5,000.00												
	\$6,788.00												
	\$174,612.00												
	\$650.00												
<b>Grand Total Fee</b>													\$176,292.00

**ARCADIS U.S., Inc.**  
**SHORT FORM SUBCONTRACT AGREEMENT (Under \$25,000)**

<p><b>PLEASE INCLUDE ARCADIS PROJECT NUMBERS &amp; PROJECT MANAGER NAME ON ALL INVOICES, LIEN WAIVERS AND INSURANCE CERTIFICATES:</b></p>	<p align="right">ARCADIS PROJECT NO-05687004.0000 CLIENT NAME: <del>FORBES</del> <b>CITY OF HUNTSVILLE, AL</b></p>
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<p><b>TYPE OF SERVICE(S) TO BE PERFORMED (Check All That Apply):</b></p> <p><input checked="" type="checkbox"/> Consulting</p> <p><input type="checkbox"/> Construction (include Schedule F)</p> <p><input type="checkbox"/> Drilling: all methods, Excavating &amp; Intrusive services (include Schedule G)</p> <p><input type="checkbox"/> Laboratory (include Schedule H – there are 2 Parts to the Work Authz.)</p> <p><input type="checkbox"/> Surveying (include Schedule I)</p> <p><input type="checkbox"/> Security Services (include Schedule J)</p> <p><input type="checkbox"/> Utility Location/Clearance (include Schedule G)</p> <p><input type="checkbox"/> Other: _____</p>	<p><b>MAIL ALL INVOICES TO:</b></p> <p align="center">ARCADIS U.S., Inc. Attention: Accounts Payable 630 Plaza Drive, Suite 600 Highlands Ranch, CO 80129</p> <p><i>ARCADIS prefers to pay via EFT (Electronic Funds Transfer), therefore contact the AP Hotline and provide: your ABA routing number, bank account number, name on the account. In addition every invoice should include the relevant ARCADIS project manager's name (first and last name) and the ARCADIS 12-digit project number (e.g. GA123456.0000) to ensure timely payment. AP Hotline – 303.471.3699 or E-Mail billing inquiries to AccountsPayable.Administration@arcadis-us.com</i></p>
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**YOUR COMPENSATION FOR THESE SERVICES SHALL BE ON A:**  Time & Materials;  Cost Plus Fixed Fee of \_\_\_\_\_ %; or  Unit Pricing Basis as set forth under Schedule B with a maximum not to exceed amount of (\$ \_\_\_\_\_) authorized to cover these services. You shall not incur charges in excess of this amount without prior written approval from ARCADIS -OR-  a Lump Sum basis. If Lump Sum, a Fee of \$ 6,000.00 (\$6,000.00) is authorized to cover these services.

<b>Target Start Date:</b>	May 1, 2013	<b>Required Completion Date:</b>	September 30, 2013
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<b>ARCADIS Project Manager:</b>	Brian T. Runge, P.E.	<b>ARCADIS Area Mgr. / PIC:</b>	Jerry D. Jones
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<p><b>SUBCONTRACTOR NAME &amp; ADDRESS (PLEASE PRINT):</b></p> <p><i>Garrett &amp; Associates Appraisals, Inc. ("SUBCONTRACTOR")</i> 2515-B Memorial Parkway, South, Huntsville, AL. 35801 ATTN:Gena Garrett Telephone No. 256-534-5001 E-mail Address: mgreen@garrettappraisal.com</p>	<p><b>ARCADIS LEGAL ENTITY:</b></p> <p><i>Malcolm Pirnie, the Water Division of ARCADIS ("ARCADIS")</i> 2170 Highland Avenue South, Suite 250 Birmingham, AL 35203 ATTN:Brian T. Runge, PE Telephone No. 205-930-5928 E-mail Address: brian.runge@arcadis-us.com</p>
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SUBCONTRACTOR represents that it possesses the necessary skills and experience to provide the requested Services, including on-call emergency services ("the Work" or "the Services"), though nothing in this Agreement shall obligate ARCADIS to request any Services from Subcontractor. Subcontractor's verbal or written acceptance of a Work Authorization, or Subcontractor's performance of the Services shall constitute acceptance of the Work Authorization in its entirety. This Agreement shall consist of the following documents if designated and/or otherwise attached hereto:

<p><input checked="" type="checkbox"/> <b>AGREEMENT</b> for Subcontractor Services</p> <p><input checked="" type="checkbox"/> SCHEDULE A: General Provisions</p> <p><input checked="" type="checkbox"/> SCHEDULE B: Work Authorization</p> <p><input type="checkbox"/> SCHEDULE B: Work Authorization Part 2 – Lab Task Order</p> <p><input checked="" type="checkbox"/> SCHEDULE C: Minimum Insurance Requirements</p> <p><input checked="" type="checkbox"/> SCHEDULE D: Prime Contract Terms &amp; Conditions (Flowdowns)</p> <p><input type="checkbox"/> SCHEDULE E: Special Provisions-Other (if any)</p> <p><input type="checkbox"/> SCHEDULE F: Special Provisions for Construction Services</p> <p><input type="checkbox"/> SCHEDULE G: Special Provisions for Utility Location, Drilling; all methods, Excavating and Intrusive Services</p>	<p><input type="checkbox"/> SCHEDULE H: Special Provisions for Laboratory Services</p> <p><input type="checkbox"/> SCHEDULE I: Special Provisions for Surveyors</p> <p><input type="checkbox"/> SCHEDULE J: Special Provisions for Security Services</p> <p><input type="checkbox"/> SCHEDULE L: Ethical Business Practices Provision (Non-U.S. Work)</p> <p><input type="checkbox"/> EXHIBIT 2: Release of Lien Form</p> <p><input checked="" type="checkbox"/> EXHIBIT 3: Subcontractor's duly authorized and compliant Insurance Certificate</p>
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This Agreement for Subcontractor Services ("Agreement") is made this \_\_\_\_\_ day of \_\_\_\_\_, 2013, (the "Effective Date").

<p align="center"><b>SUBCONTRACTOR</b></p> <p>By: </p> <p align="center">(Signature of duly Authorized Representative)</p> <p>Name Printed: <u>Thomas E. Garrett</u></p>	<p align="center"><b>ARCADIS</b></p> <p>By: </p> <p align="center">(Signature of duly Authorized Representative)</p> <p>Name Printed: <u>Jerry D. Jones</u></p>
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Title Printed: \_\_\_\_\_

Title Printed: \_\_\_\_\_

# ARCADIS AGREEMENT FOR SUBCONTRACTOR SERVICES

## SCHEDULE A - GENERAL TERMS AND CONDITIONS

**1. WORK / SERVICES.** SUBCONTRACTOR shall diligently perform all services, furnish all labor and materials and perform all tasks necessary to produce all of the deliverables required and perform all of the Work reasonably implied or inferred under the terms of this Agreement, its Schedules and Exhibits, as well as all other documents attached to or incorporated by reference as forming a part of this Agreement. SUBCONTRACTOR shall comply with all applicable laws and regulations of any governmental agency having jurisdiction (including any requirement to obtain and maintain any permits, licenses, or approvals) in order to complete the Work. Time is of the essence in the performance of the obligations created by this Agreement. SUBCONTRACTOR agrees to commence and complete the Work in accordance with any schedule incorporated into this Agreement, or any schedule submitted by SUBCONTRACTOR and otherwise accepted in writing by ARCADIS; and with respect to any Changes, out of scope or additional work, SUBCONTRACTOR shall expeditiously perform such work according to any schedule therefore agreed to by the parties. SUBCONTRACTOR, its employees, and its agents are not the agents, representatives or employees of ARCADIS, and SUBCONTRACTOR is and shall be an independent contractor with regard to the Services.

**2. COMPENSATION / PAYMENT.** (a) SUBCONTRACTOR may invoice ARCADIS after it has completed the Work, or portions thereof, and any required corrections to the satisfaction of ARCADIS, and delivered in accordance with the terms of this Agreement all maintenance and operating instructions, schedules, guarantees, Bonds, certificates or other evidence of insurance required hereunder, certificates of inspection, marked-up record documents, required itemizations and other documents required for progress payments.

(b) ARCADIS prefers to pay via ETF (Electronic Funds Transfer). ARCADIS agrees to pay SUBCONTRACTOR within fifteen (15) days of ARCADIS' receipt of payment from Client for SUBCONTRACTOR's satisfactory Work which has been accepted by the Client. SUBCONTRACTOR expressly agrees that it shall be a condition to any payment that ARCADIS shall have received payment from the Client for such work of the SUBCONTRACTOR, and that such payment by the Client shall be a condition precedent to ARCADIS' obligations hereunder, and that ARCADIS shall have no obligation to SUBCONTRACTOR unless payment for such work is made to ARCADIS by the Client.

(c) SUBCONTRACTOR warrants that title to and ownership of the Work shall transfer to ARCADIS free and clear of all liens or rights of liens. No payment shall be made to SUBCONTRACTOR without a duly executed Agreement and a valid, current Certificate of Insurance in compliance with this Agreement. Payments made to the SUBCONTRACTOR will include compensation for any and all applicable sales, use, gross receipts or excises taxes.

(d) In recognition that ARCADIS' client agreement requires the prompt submission of invoices for payment, the parties agree that all invoices must be submitted by SUBCONTRACTOR to ARCADIS within ninety (90) days of the date costs are incurred or the scheduled completion date whichever occurs first. SUBCONTRACTOR waives its right to receive payment on any and all invoices which are not submitted within that time period. ARCADIS may set-off or counterclaim against amounts payable to SUBCONTRACTOR, or asserted to be payable to SUBCONTRACTOR, under this or any other contract, any claim ARCADIS may have against SUBCONTRACTOR, including any failure to comply with any terms herein.

**3. STANDARD OF CARE / MATERIALS AND WORKMANSHIP WARRANTIES.** FOR PROFESSIONAL SERVICES. SUBCONTRACTOR shall faithfully perform its services and the Work using the highest degree of care, skill, training, diligence and judgment ordinarily exercised under similar circumstances by competent members of the profession which SUBCONTRACTOR practices or industry or business in which SUBCONTRACTOR works. SUBCONTRACTOR agrees to promptly reperform, repair or replace, at ARCADIS' option and at SUBCONTRACTOR's cost and expense, any service or Work which fail to conform to such requirements or in the event such a degree of skill and care is not exercised. FOR OTHER SERVICES. SUBCONTRACTOR further warrants and guarantees that all goods and materials provided hereunder shall be: (i) be new and fit for the intended purpose, (ii) provided in conformance with types and quantities specified; (iii) installed by qualified, careful and efficient workers; and, (iv) free from defects in materials and workmanship for a period of one (1) year from completion and acceptance by ARCADIS (or such longer period of time as may be required by the Prime Contract between ARCADIS and its Client).

**4. CHANGES.** No changes to this Agreement and no extra charges will be

allowed unless a duly authorized representative of ARCADIS specifically agrees to them in writing. As a condition precedent to SUBCONTRACTOR's recovery on any claim for an increase in the cost of the Work or for an extension of time to complete the Work (a "Claim"), SUBCONTRACTOR shall, immediately after the occurrence of the event which SUBCONTRACTOR believes may give rise to a Claim, give ARCADIS written notice of the claim, which notice shall contain a verified statement that supports the claim and details the estimated change in the Subcontract cost and the time to complete the Work. SUBCONTRACTOR's failure to provide notice as required by this paragraph shall be a waiver of SUBCONTRACTOR's right to recovery under the terms of the Prime Contract between ARCADIS and on a Claim. In no event shall SUBCONTRACTOR be entitled to compensation for changes which are not reimbursable to ARCADIS its Client. Any determination by ARCADIS or Client with regard to same shall be binding upon SUBCONTRACTOR.

**5. INSURANCE.** Please See Schedule C.

**6. INDEMNITY.** To the fullest extent provided by law, SUBCONTRACTOR agrees to indemnify, defend and hold harmless ARCADIS and the Client served under this Agreement and the directors, officers, employees, shareholders and affiliates of either of them from and against any and all liabilities, losses, damages, judgments, costs and expenses (including attorneys' fees and court costs) which Client, ARCADIS and their directors, officers, employees and agents hereafter may suffer as the result of any breach by SUBCONTRACTOR of the terms of this Agreement or in connection with any claim, demand, action or right of action (whether at law or in equity) brought or asserted by any third party including, but not limited to any personal injury (including death) or property damage relating to or arising from the performance of the Work by the SUBCONTRACTOR, its directors, officers, employees, affiliates, lower-tier subcontractors, agents or representatives. SUBCONTRACTOR shall not be liable to the extent that any liability, loss, damage, cost, and expense results from the sole negligence or willful misconduct by ARCADIS or its directors, officers, employees or agents. If the governing law defined in Section 9 below expressly prohibits indemnification by the SUBCONTRACTOR for the negligence of ARCADIS or its directors, officers, employees or agents, then, and only then, the SUBCONTRACTOR further shall not be liable to the extent, and only to the extent, that SUBCONTRACTOR can demonstrate that any liability, loss, damage, cost and expense directly results from the negligence or willful misconduct of ARCADIS or its directors, officers, employees or agents. SUBCONTRACTOR agrees to promptly pay ARCADIS all sums ARCADIS may be required to pay in settlement of any Loss on account thereof, including any claim under the provisions of any workers' compensation law or similar law. In the event any Loss is claimed by one party against the other, and the claiming party does not succeed in proving the Loss, the other party shall be entitled to recover, within a reasonable period of time after demand therefore, all reasonable costs incurred. If the governing law requires a monetary limitation on the indemnity contained in this Section 6, then, and only then, the liability of the SUBCONTRACTOR under this Section 6 shall not exceed the maximum amount of insurance that the SUBCONTRACTOR agreed to maintain under this Agreement, including any higher amounts of insurance required per the terms of any prime contract.

**7. ASSIGNMENT / SUBCONTRACTS.** SUBCONTRACTOR shall not assign any proceeds or subcontract any of the Work to be performed hereunder without the express written consent of ARCADIS. SUBCONTRACTOR will be fully responsible to ARCADIS for the acts and omissions of its lower-tier subcontractors and of persons either directly or indirectly employed by all of SUBCONTRACTOR's lower-tier subcontractors.

**8. TERMINATION.** ARCADIS may terminate this with or without cause after upon delivery of written notice to SUBCONTRACTOR. In the event ARCADIS shall terminate without cause, ARCADIS shall be liable to SUBCONTRACTOR in accordance with the terms of this Agreement, inclusive of the limitations set forth in the Prime Contract between ARCADIS and its Client, for any outstanding amount owing to SUBCONTRACTOR for Services provided to ARCADIS satisfaction through the effective date of termination.

If this Agreement is terminated for cause, ARCADIS may procure, upon such terms as it shall deem appropriate, supplies or services similar to those so terminated. SUBCONTRACTOR shall continue performance under this Agreement to the extent not terminate and shall be liable to ARCADIS for any excess cost for such similar supplies or services, and for any other costs, expenses, or liabilities incurred by

ARCADIS and/or its Client(s) as a result of SUBCONTRACTOR's default. ARCADIS reserves the right to offset any such costs, expenses or liabilities against monies due to SUBCONTRACTOR under this or any other AGREEMENT. In the event the amount of damage exceeds the balance due to SUBCONTRACTOR, SUBCONTRACTOR shall pay to ARCADIS the amount of such excess. The rights and remedies of ARCADIS set forth in this Paragraph shall not be exclusive and are in addition to all other rights and remedies of ARCADIS.

**9. USE OF DOCUMENTS / CONFIDENTIALITY / OWNERSHIP.** SUBCONTRACTOR shall maintain complete and accurate working files and/or documentation of the Work, including new data, calculations, estimates, assumptions, logs, maps, drawings, plans, specifications, diaries, interpretations, notes and calibrations, for a period of ten (10) years following final payment under this Agreement or until final conclusion of any litigation or administrative proceeding arising under or materially concerning this Agreement or the Work, and shall provide ARCADIS unrestricted access to such items and dispose of them only as directed by ARCADIS. All documents provided by SUBCONTRACTOR pursuant to this Agreement are instruments of service of SUBCONTRACTOR, and SUBCONTRACTOR shall retain an ownership and property interest therein (including the right of reuse) until ARCADIS has made payment to SUBCONTRACTOR for such documents pursuant to this Agreement. Notwithstanding the foregoing, upon termination of this Agreement or at an earlier time if ARCADIS requests, SUBCONTRACTOR will deliver to ARCADIS any data, materials or information received or generated in the performance of this Agreement. Except to the extent required by law or government order, or as expressly permitted by the prior written consent of ARCADIS, SUBCONTRACTOR agrees not to disclose any third party data, information, or documentation obtained, created, compiles, or prepared (in whatever form) by SUBCONTRACTOR in connection with the performance of Work under this Agreement or any Work Authorization issued hereunder. SUBCONTRACTOR and its subcontractors will not use or designate for use in connection with the Work any patented or patent-pending article, method or device which involves or requires payment of any license, fee or royalty in addition to the purchase price without ARCADIS' prior written approval. SUBCONTRACTOR agrees to indemnify ARCADIS against any cost or expense incurred in connection with the payment of such license, fee or royalty in the event that ARCADIS' prior approval is not obtained and SUBCONTRACTOR shall defend any suit or proceeding brought against ARCADIS based on a claim that any item or part of an item furnished under this Agreement constitutes an infringement of any patent, trademark, service mark, or copyright, and shall pay all damages and costs awarded against ARCADIS or required to be paid in settlement of the claim. If the use of an item or part of an item is enjoined, SUBCONTRACTOR shall at its own expense either procure for ARCADIS the right to continue using the item or part or replace it with a non-infringing item or part or modify the item or part so that it becomes non-infringing.

**10. GOVERNING LAW / SEVERABILITY AND WAIVER.** Governing law shall be as set forth in the Prime Contract between ARCADIS and its Client. In the absence of such provision, the laws of the State in which the Site is located shall govern this Agreement and the legal relations of the Parties. No waiver of the terms, conditions, or covenants of this Agreement shall be binding and effective unless the same shall be in writing, signed by both parties. If any portion of this Agreement is held invalid or inoperative, then so far as is reasonable and possible, the remainder of this Agreement shall be deemed valid and operative, and effect shall be given to the intent manifested by the portion held invalid or inoperative.

**11. NOTICES.** Any such notices shall be either: (i) sent by certified mail, return receipt requested, in which case notice shall be deemed delivered three business days after deposit, postage prepaid in the U.S. Mail; (ii) sent by overnight delivery using a nationally recognized overnight courier, in which case it shall be deemed delivered one business day after deposit with such courier; or (iii) sent by personal delivery. The above addresses may be changed by written notice to the other Party; provided, however, that no notice of a change of address shall be effective until actual receipt of such notice. Copies of notices are for informational purposes only, and a failure to

give or receive copies of any notice shall not be deemed a failure to give notice.

**12. INCORPORATION BY REFERENCE.** This Agreement is subject to the terms and conditions of the contract or agreement entered into between ARCADIS and the owner or client for the specific Project. SUBCONTRACTOR acknowledges that it has received a copy of such contract and agrees to perform all obligations of such contract as it applies and with respect to the Work of the SUBCONTRACTOR, including any terms and provisions for indemnity, insurance, warranties, and liquidated damages. The terms and conditions of this Agreement and its attachments are intended to be inclusive and complementary. In the event of a conflict between the terms of this Agreement and any of the Schedules or Exhibits attached hereto or incorporated by reference, the following Order of Precedence shall apply: Schedule D - Prime Contract Terms & Conditions, Schedules F-J Special Provisions (as appropriate), Schedule A - General Provisions, Schedule C - Insurance, and Schedule B - Work Authorization (when executed by both Parties) Schedule E - Special Provisions-Other (If Any).

**13. ENTIRE AGREEMENT / AMENDMENTS.** This Agreement constitutes the entire agreement between the Parties with respect to the Work, and supersedes all prior negotiations, representations or agreements relating thereto, written or oral, except to the extent they are expressly incorporated herein. Unless otherwise provided for herein, no amendments, changes, alterations or modifications of this Agreement shall be effective unless in writing, executed by ARCADIS and SUBCONTRACTOR. No other waiver, alteration, or modification of any provision in this Agreement will be binding on either party. Any course of prior dealings or usage of the trade not expressly incorporated in this Agreement shall not be binding on either party. The parties represent and warrant that each has had the opportunity to review and negotiate the terms of this Agreement, with the benefit of counsel if desired, and agree that any ambiguity shall not be construed against the drafter.

**14. WASTE TRANSPORTATION.**

Waste Materials scheduled for disposal by SUBCONTRACTOR pursuant to this Agreement shall be agreed upon in advance in writing by SUBCONTRACTOR and ARCADIS. At the time ARCADIS requests disposal services of SUBCONTRACTOR, ARCADIS shall provide a Waste Profile Sheet or similar document ("Waste Profile") to SUBCONTRACTOR describing the Waste Materials. Waste Materials which are discovered to be non-conforming may be rejected by SUBCONTRACTOR so long as said Waste Materials have not been materially changed (such as by treatment, processing or commingling). Waste Materials shall be considered non-conforming, for purposes of this Agreement: (i) if they are not in accordance with the descriptions, limitations or specifications stated in the Waste Profile; or (ii) if they contain constituents or components, not specifically identified in the Waste Profile, (a) which materially increases the nature or extent of the hazard and risk undertaken by Subcontractor in agreeing to handle, load, transport, store, treat or dispose of the waste materials, or (b) for whose storage, treatment or disposal the SUBCONTRACTOR's disposal facility is not designed or permitted. A justified revocation of acceptance shall operate to revert title, risk of loss and all other incidents of ownership in ARCADIS' Client or the waste generator if other than ARCADIS' client, at the time revocation is received by ARCADIS. ARCADIS shall pay SUBCONTRACTOR for the handling, transporting, storing and caring for and, if applicable, disposing of such non-conforming waste materials located on SUBCONTRACTOR's premises or make arrangements with others to remove non-conforming wastes from SUBCONTRACTOR's facilities.

- END OF SCHEDULE A - GENERAL TERMS AND CONDITIONS -

**SCHEDULE B: SCOPE OF WORK / BASIS OF COMPENSATION**

04/23/13

**1. GENERAL INFORMATION**

The Agreement for Subcontractor Services ("Subcontract Agreement") signed on <u>9 April 2013</u> by and between <u>ARCADIS US</u> (insert ARCADIS legal entity) and <u>Garrett &amp; Associates</u> ("Subcontractor")		"WORK AUTHORIZATION No.	
Date Issued:		ARCADIS Project No	05687004.0000
Subcontractor Name & Address:	<u>Garrett &amp; Associates Appraisals, Inc.</u> 2515-B Memorial Parkway, South, Huntsville, AL. 35801	ARCADIS' Client Name / Prime Contract Effective Date:	City of Huntsville, Alabama

**2. PROJECT INFORMATION**

Project Name: City of Huntsville, AL Dallas Branch/Pinhook Creek Phase II Completion	Project Location: Huntsville, AL
ARCADIS Project Manager: Brian Ruggs, PE	ARCADIS PIC/Area Manager: Jerry D. Jones

**3. BILLING INFORMATION**

Mail All Invoices To:	ARCADIS U.S., Inc. Attention: Accounts Payable 630 Plaza Drive, Suite 600 Highlands Ranch, CO 80129	ARCADIS prefers to pay via ETF (Electronic Funds Transfer), therefore contact the AP Hotline to provide: your ABA routing number, bank account number, name on the account. In addition every invoice should include the relevant ARCADIS project manager's name (first and last name) and the ARCADIS 12-digit project number (e.g. GA123456.0000) to ensure timely payment. Invoices without the required information may be returned unpaid with a request for the missing information, resulting in delayed payment.
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**AP Hotline – 303.471.3699 or E-Mail billing inquiries to [AccountsPayable.Administration@arcadis-us.com](mailto:AccountsPayable.Administration@arcadis-us.com)**

SUBCONTRACTOR shall reference the **ARCADIS Project, Subcontract and Work Authorization Numbers** on all invoices. SUBCONTRACTOR shall also include the Total Amount Authorized as well as amounts due for the **Current Billing Period** and **Project To-Date** Totals on all invoices.

**4. WORK AUTHORIZATION / CHANGE ORDER INFORMATION**

Work Authorization / Change Order Initiated By:	<input checked="" type="checkbox"/> ARCADIS	<input type="checkbox"/> Subcontractor
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**5. TO AUTHORIZE A NEW SCOPE OF WORK**

In accordance with the terms and conditions of the Subcontract Agreement referenced above between Malcolm Pirnie, the Water Division of ARCADIS (hereinafter referred to as "ARCADIS") and SUBCONTRACTOR, SUBCONTRACTOR is authorized to provide the following services:

**DESCRIPTION OF WORK:**

ARCADIS, U.S. (AUS) is in the process of designing channel improvements and a flood control project on the Dallas Branch/Pinhook Creek for the City of Huntsville related to a FEMA grant awarded to the City. You are hereby engaged to update the real estate valuation ratio study conducted by your company in April 2006 and updated in 2009. This update will be used by AUS to support development of a benefit/cost analysis of the flood mitigation project being designed by the City of Huntsville.

Your study will require a comparison of sales data to tax values for residential and non-residential properties as described in the Project Reach above. These ratios will be used to estimate cost less depreciation/market values for all structures affected by the City's flood mitigation project alternatives. You will use the same statistical methods used in the 2006 and 2009 studies.

You will deliver a report similar to the format of the 2006 and 2009 studies, with two (2) improvement class categories, Residential and Non-Residential, and a minimum sample size (if possible) of 100 and 50 respectively per category.

<b>ADDITIONAL INFORMATION ATTACHED?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes, identify: _____ or check box(es) below
<b>FOR LABORATORY SERVICES:</b>	<input checked="" type="checkbox"/> Prime Agreement Incorporated by Reference <input type="checkbox"/> Current Compliant Insurance Certificate
<b>FOR INTRUSIVE WORK (Drilling, Excavating, etc.):</b>	<input type="checkbox"/> Release/Waiver of Claims and Liens Form
	<input type="checkbox"/> Work Authorization, Part 2 - Laboratory Task Order (LTO)
	<input type="checkbox"/> ARCADIS to dispose of SUBCONTRACTOR generated purge water and core drillings
<b>PROJECT SCHEDULE</b> <u>7 months</u>	Target Start Date: <u>15 May 2013</u> Required Completion Date: <u>31 Aug 2013</u>
<b>YOUR COMPENSATION FOR THESE SERVICES SHALL BE:</b>	

<input type="checkbox"/> Time & Materials in accordance with the attached Rate Schedule	<input type="checkbox"/> Cost plus Fixed Fee of _____ % in accordance with attached Fixed Fee Schedule	<input type="checkbox"/> Unit Pricing in accordance with the attached Unit Price Fee Schedule
A maximum not to exceed amount of (\$_____) is authorized to cover these services. SUBCONTRACTOR shall not incur charges in excess of this amount without prior written approval from ARCADIS.		
<b>-OR-</b>		
<input checked="" type="checkbox"/> A Lump Sum Fee of (\$5,000.00) is authorized to cover these services.		
<b>MILESTONE PAYMENT SCHEDULE</b> <input type="checkbox"/> Attached		
IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THE SUBCONTRACT AGREEMENT REFERENCED ABOVE BETWEEN _____ (HEREINAFTER REFERRED TO AS "ARCADIS") AND SUBCONTRACTOR, THE PREVIOUSLY AUTHORIZED SCOPE OF WORK AND BASIS OF COMPENSATION IS MODIFIED AS FOLLOWS:		
<b>Description of Change:</b>		
<b>Reason for Change:</b>		
<b>Additional Information Attached?</b>	<input type="checkbox"/> No	
<b>Schedule Impact?</b>	<input type="checkbox"/> No <input type="checkbox"/> Yes, explain: _____ and insert revised start and/or completion dates below, as applicable	
	Original Project Start Date:	New Project Start Date:
	Original Project Completion Date:	New Project Completion Date:
<b>Cost Impact?</b>	<input type="checkbox"/> No change to Subcontract Price <input type="checkbox"/> Subcontract Price Increased <input type="checkbox"/> Subcontract Price Decreased	
	<input type="checkbox"/> No change in subcontract amount presently anticipated; however, final subcontract amount to accommodate this change upon project completion.	
<b>Cost Increase / Decrease</b>	The amount of the subcontract will be <input type="checkbox"/> increased or <input type="checkbox"/> decreased by the sum of _____ (\$_____).	
	The total revised Contract Price is _____ (\$_____)	
<b>Original Subcontract Expiration Date:</b> _____ <b>New Subcontract Expiration Date:</b> _____		
<b>Apply New Rates to:</b> <input type="checkbox"/> New Work Authorizations Only Effective: _____ <input type="checkbox"/> New and Existing Work Authorizations Effective: _____		
The undersigned SUBCONTRACTOR accepts this Work Authorization in all respects noted above. This document shall become a supplement to the Subcontract Agreement and all provisions will apply hereto. It is understood that the Work Authorization shall be effective on <u>9/01</u> , 20 <u>13</u>		
<b>SUBCONTRACTOR</b>	<b>ARCADIS</b>	
By: <u>Thomas E. Garrett</u> (Signature of duly Authorized Representative)	By: <u>[Signature]</u> (Signature of duly Authorized Representative - Per Signature Authority Matrix)	
Name Printed: <b>Thomas E. Garrett</b>	Name Printed: <b>Jerry Jones</b>	
Title Printed: <b>President</b>	Title Printed: <b>Vice President</b>	

**ARCADIS  
AGREEMENT FOR SUBCONTRACTOR SERVICES**

**SCHEDULE C - INSURANCE**

SUBCONTRACTOR shall provide and maintain during the term of this Agreement, at SUBCONTRACTOR's expense, the minimum limits of insurance listed below:

1. Workers' Compensation, Disability Benefit, and Employer's Liability Insurance in at least the minimum amounts required by and in compliance with the laws of the State(s) where the Work is to be performed.
2. Commercial General Liability Insurance, including contractual liability, completed operations, hazards and explosion, collapse and underground hazard coverage, with a limit of not less than \$1,000,000 per occurrence, \$2,000,000 aggregate. All such insurance policies shall provide (unless by specific statute applicable thereto it is otherwise provided) coverage for: (a) damage to above-ground or underground property; (b) collapse of structures; (c) damage resulting from explosion or blasting; (d) damages or losses arising out of liabilities assumed, except infringement, under the indemnity provision of this Agreement; and (e) damage to completed operations.  
  
If the Work to be performed is within or near a railroad right-of-way and other railroad facilities, SUBCONTRACTOR's insurance shall not include any exclusions of coverage for any claims or liabilities associated with work, occurrences or incidents occurring within 50 feet of railroad right-of-way and other railroad facilities. SUBCONTRACTOR can generally meet this requirement by having the Contractual Liability - Railroads standard form endorsement form ISO CG 24 17 10 01 or equivalent. SUBCONTRACTOR's Certificate of Insurance shall state that the railroad liability exclusion has been removed or otherwise deleted from its Commercial General Liability policy or SUBCONTRACTOR may provide a copy of ISO CG 24 17 10 01 or its equivalent.
3. Automobile Liability Insurance covering owned, non-owned, and hired vehicles used by SUBCONTRACTOR in connection with the Work with a limit of not less than \$1,000,000 per accident combined single limit, \$1,000,000 aggregate. When transporting waste motor carrier endorsement form MCS-90 will be required.
4. Following form Excess Umbrella Liability Insurance extending coverage under Subcontractor's comprehensive general, automobile and Employer's Liability insurance policies with a limit of \$2,000,000 per occurrence and in the aggregate.
5. If professional services, including but not limited to engineering, architectural, laboratory analysis and/or surveying services, are part of the Work, Professional Liability (Errors and Omissions) Insurance with a limit of not less than \$1,000,000 per claim, \$1,000,000 aggregate. SUBCONTRACTOR, at its cost, agrees to maintain insurance meeting these requirements for a period of two years the date of this Agreement.
6. If the Work involves the handling, transportation or use of chemicals or contaminants or work areas containing pollutants or hazardous materials, Pollution Liability with a limit of not less than \$1,000,000 per incident, \$1,000,000 aggregate to coverage damage or losses relating to environmental impairment as may have been caused by the SUBCONTRACTOR.

SUBCONTRACTOR shall provide ARCADIS with a certificate of insurance indicating that the minimum types and limits of insurance have been procured by SUBCONTRACTOR prior to final execution of this Agreement. All certificates **must contain** the applicable ARCADIS project manager contact name (first and last name) and the ARCADIS 12-digit project number to ensure timely payment. SUBCONTRACTOR shall cause its insurers to provide a policy provision providing ARCADIS and Client with a minimum of thirty (30) days written notice prior to the effective date of cancellation of,

or diminution in the coverage provided by, any and all such policies.

SUBCONTRACTOR agrees to name "ARCADIS U.S., INC., its Client and their affiliates, directors, officers, employees, and agents" as additional insured as their interests may apply on all policies as required by Schedule C (with the exception of the Workers' Compensation, Employer's Liability, and any Professional Liability Policy). SUBCONTRACTOR shall provide copies of such endorsements.

SUBCONTRACTOR shall cause the underwriters of each of the insurance coverage required above waive all rights of subrogation against "ARCADIS U.S., Inc., its Client and their affiliates, directors, officers, employees, and agents" where allowed by law under each of the foregoing policies.

Upon request SUBCONTRACTOR shall provide ARCADIS with certified copies of its insurance policies.

SUBCONTRACTOR agrees to promptly notify ARCADIS of any claims or losses or potential claims or losses resulting from or arising out of SUBCONTRACTOR's performance of the Work and shall, within three (3) days of occurrence, provide ARCADIS with copies of SUBCONTRACTOR's correspondence pertaining to the incident, including any and all SUBCONTRACTOR accident reports.

Notwithstanding the foregoing, in the event that the contract between ARCADIS and the Client specifies greater limits of insurance than those set forth above, the SUBCONTRACTOR shall procure and maintain the limits in the amounts specified in such contract and to notify ARCADIS of any failures to comply prior to accepting the contemplated work. In the event SUBCONTRACTOR fails to provide such notice, ARCADIS shall have the right but not the obligation to procure said insurance for SUBCONTRACTOR. SUBCONTRACTOR shall pay ARCADIS any and all costs and expenses incurred by ARCADIS in procuring said insurance, and ARCADIS may deduct this amount from the Subcontract cost.

SUBCONTRACTOR shall provide proof of insurance coverage as may be required in this Agreement and each Work Authorization prior to commencing the Work. Said proof of coverage shall be in the form of a duly executed and properly endorsed insurance certificate from an insurance carrier licensed to transact insurance business in the state in which the Work is to be performed. Each certificate shall certify that all of the required insurance, as above described, has been effected and that the SUBCONTRACTOR is covered thereby.

SUBCONTRACTOR's failure to procure the required types and limits of insurance as set forth herein, shall not relieve SUBCONTRACTOR of its indemnification obligations hereunder.

Any coverage provided ARCADIS by SUBCONTRACTOR'S insurance under this Agreement is primary insurance and shall not be considered contributory insurance with any insurance policies of ARCADIS, its members, subsidiaries, and affiliated companies.

Whenever an employee of SUBCONTRACTOR suffers an occupational injury or disease as a result of the Work and such injury or disease is required by the Workman's Compensation or Occupational Disease Laws to be reported to the proper authorities, a copy of such report shall be furnished promptly by SUBCONTRACTOR to ARCADIS. SUBCONTRACTOR also shall require all subcontractors to furnish copies of such reports to ARCADIS in connection with occupational injuries or diseases sustained by their employees.

- END OF SCHEDULE C - INSURANCE -

**ARCADIS  
AGREEMENT FOR SUBCONTRACTOR SERVICES**

**SCHEDULE D - PRIME CONTRACT TERMS & CONDITIONS (Flowdowns)**

**SP-D1. CONTRACT**

The Prime Contract between Client and ARCADIS is attached and made part of this Agreement.

ARCADIS and the SUBCONTRACTOR agree that the Prime Contract between ARCADIS and the Client is a part of this Agreement to the extent that its terms affect the services to be provided by the SUBCONTRACTOR under this Agreement. In the event of a conflict between the terms of this Agreement and the Prime Contract, the stricter terms shall control. The Prime Contract is attached hereto and made a part hereof as Schedule D.

## **CONSULTING AGREEMENT**

This CONSULTING AGREEMENT (the "Agreement"), effective as of March 30, 2013, is entered into by and between ARCADIS U.S., Inc. ("COMPANY") and M. J. Connors Consulting, ("CONSULTANT") (collectively, the "Parties").

In consideration of the mutual promises and covenants set forth below, the mutuality, adequacy, and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. **Consulting.** During the term of this Agreement, on the terms and conditions set forth, COMPANY retains CONSULTANT to provide certain defined services, and CONSULTANT agrees to provide such services. CONSULTANT's services shall be rendered in accordance with all applicable professional standards and practices. It is agreed and understood that this Agreement is for unique professional services. Retention of the CONSULTANT is based on the particular professional expertise of the designated individual rendering the services set forth in this Agreement. Accordingly, the described services may not be delegated without the prior written consent of ARCADIS. It is mutually agreed that Marty Connors is the designated Key Person ("Key Person") responsible for delivery of all services hereunder.
  
2. **Scope of Duties.** CONSULTANT agrees to perform professional consulting services for COMPANY, which shall include, but not be limited to, the following:
  - a. CONSULTANT will use its knowledge, experience and personal relationships with FEMA and other state/federal entities to assist in promoting the Dallas Branch/Pinhook Creek Flood Control Project, provide information and introductions to community and governmental leaders strategic to project implementation.

- b. **CONSULTANT will suggest strategic activities that might enhance the probability of winning approval of the subject project; and**
- c. **CONSULTANT will provide services when requested by COMPANY and as mutually agreed upon by Parties.**

**3. Term and Termination.**

- a. **The term of this Agreement shall be for a period of 7 months, beginning on the date written above (the "Term").**
- b. **Either party may terminate this Agreement in the event of breach of this Agreement by the other party, where such breach remains uncured for a period of ten (10) days after written notice of such breach to the other party.**
- c. **COMPANY may terminate this Agreement upon the death of the Key Person or upon the inability, because of the illness or other incapacity, of the Key Person to perform the scope of services set forth in this Agreement for the 7 month period.**

**4. Compensation. COMPANY shall pay CONSULTANT an amount not to exceed Seven Thousand dollars (\$7,000.00) during the term of this Agreement on a time and materials basis.**

**5. Time Devoted. It is anticipated that the CONSULTANT shall spend as much time as reasonably deemed necessary by COMPANY in order to effectively perform CONSULTANT'S obligations under this Agreement.**

**6. Status. CONSULTANT is, and shall perform the services under this Agreement as, an independent contractor, and not as an agent or as an employee of COMPANY. CONSULTANT shall act on behalf of COMPANY only to the extent specified by this Agreement, and shall have no power to bind COMPANY by contract or otherwise, nor represent to third parties that it does**

have such authority. CONSULTANT shall have full responsibility for the payment of all of its federal, state, and local taxes and contributions, including penalties and interest, imposed pursuant to unemployment insurance, social security, income tax, workers' compensation, or any other similar law.

7. **Confidential Information.** CONSULTANT shall safeguard any proprietary information disclosed to CONSULTANT by COMPANY under the terms of this Agreement. For purposes of this Agreement all such proprietary information shall be deemed "Confidential Information." CONSULTANT shall not disclose or cause to be disclosed any such Confidential information without the prior written consent of COMPANY. Information shall not be considered Confidential for purposes of this Agreement which: (a) is in the public domain; (b) is published or otherwise becomes part of the public domain through no fault of the receiving party; or (c) was in the possession of the receiving party at the time of disclosure and was not acquired from the disclosing party under an obligation of confidence. Confidential Information will also include any information derived from Confidential Information, as well as any conclusion, judgments, or inferences concerning such information. The provisions of this paragraph shall survive the termination of this Agreement.
8. **Ownership of Work Product.** All records or work created by CONSULTANT in completing the services described in this Agreement, including, but not limited to, written reports, proposals, studies, and other data shall become the property of COMPANY. Subject to the confidentiality provisions of this Agreement, CONSULTANT may retain copies of such documents for record purposes.
9. **Compliance with Law.** Both parties shall comply, at their own expense, with all federal, state, and local laws, regulations, rules, ordinances, and orders of any kind, which are applicable to performance of this Agreement. CONSULTANT agrees that services that it will perform under this Agreement will not require it to register as a "lobbyist" under all applicable laws and regulations.

10. **Conflicts.** CONSULTANT agrees it will not accept any work, enter into any contract, or accept any obligation inconsistent or incompatible with CONSULTANT's obligations to COMPANY, or the scope of services rendered for COMPANY under this Agreement.
  
11. **Indemnification.** As an independent contractor, CONSULTANT shall be responsible for its own operations and, as such, CONSULTANT agrees to indemnify, hold harmless, and defend COMPANY, and any and all of COMPANY's affiliates, partners, directors, officers, agents, and employees, from and against all loss, injury, damages, and legal liability, including attorneys' fees and other costs of defense, arising out of any negligent act, error or omission, breach of contract, or willful misconduct of CONSULTANT, its employees or representatives.
  
12. **Insurance.** During the Term of this Agreement, CONSULTANT shall maintain Worker's Compensation and Employer's Liability insurance, with at least the limit required by statute, and automobile insurance with limits of no less than the following: bodily injury of \$100,000 per person and \$300,000 per accident; property damage of \$100,000; and, bodily injury caused by an uninsured motorist of \$100,000.
  
13. **No Federal Lobbying.** CONSULTANT shall not engage in any federal lobbying activities or make any lobbying contacts as defined by the Lobbying Disclosure Act of 1995 and related amendments or rules on behalf of COMPANY.
  
14. **Notices.** Any notice required to be given pursuant to this Agreement, shall be in writing and effective, (i) when personally delivered to the party for whom intended; or (ii) the day following deposit when sent by overnight courier; or (iii) three (3) days following deposit in the United States mail (certified mail, postage prepaid, and return receipt requested).

**All notices directed to COMPANY shall be addressed to:**

**Jerry D. Jones**

**Vice President, of Malcolm Pirnie the Water Division of  
ARCADIS U.S., Inc.  
2170 Highland Ave.  
Suite 250  
Birmingham, Alabama 35205**

**All notices directed to CONSULTANT shall be addressed to:**

**Marty Connors.**

**MJ Connors Consulting  
236 Weatherly Club Drive  
Alabaster, Alabama 35007**

15. **Miscellaneous.** The Parties agree to the following additional provisions:
- a. **This Agreement shall be enforced and interpreted in accordance with the laws of the State of Alabama.**
  - b. **Any disputes arising out of or concerning this Agreement shall be submitted to non-binding mediation, prior to the initiation of any legal or judicial proceeding by either party. Any legal or judicial proceeding brought by either party against the other arising out of or related to this Agreement shall be brought only in a state or federal court of competent jurisdiction located in the state of California, and the Parties consent to the personal jurisdiction of such courts.**
  - c. **No modification of this Agreement shall be valid unless in writing and signed by both Parties.**
  - d. **This document represents the entire agreement between the Parties with respect to the subject matter of this Agreement, and merges any and all prior agreements, understandings, representations, and negotiations.**

- e. CONSULTANT shall comply with all registration and reporting requirements incident to the performance of its work under this Agreement, and shall advise COMPANY as to any registration or reporting COMPANY needs to comply with relating to CONSULTANT'S Services on behalf of COMPANY.
- f. This Agreement may not be assigned by CONSULTANT without the prior written consent of COMPANY.
- g. The provisions of this Agreement shall be deemed severable and the invalidity or unenforceability of any provisions shall not affect the validity and enforceability of the other provisions.
- h. The title designations of the numbered paragraphs of this Agreement are for convenience only, and shall not affect the interpretation or construction of this Agreement.
- i. This agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the Parties have duly executed this Agreement as of the date written above.

COMPANY

ARCADIS U.S. Inc

*PH. L.*  
*Vice President*

CONSULTANT

M.J. CONNORS CONSULTING

*Marty Connors*  
*3/26/13*

By:

*Marty Connors*  
Consulting, 236 Weatherly Club Drive, Alabaster, Alabama, 35007 205-908-6617  
3/26/13 *3/26/13*

By:

Marty Connors, M, J, Connors

**ATTACHMENT 2 - ALABAMA IMMIGRATION ACT - REPORT OF OWNERSHIP FORM**

**CITY OF HUNTSVILLE, ALABAMA REPORT OF OWNERSHIP FORM**

**A. General Information.** Please provide the following information:

- Legal name(s) (Include "doing business as", if applicable): ARCADIS US INC
- City of Huntsville current taxpayer identification number (if available): 57-0373224  
(Please note that if this number has been assigned by the City and if you are renewing your business license, the number should be listed on the renewal form.)

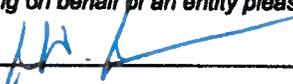
**B. Type of Ownership.** Please complete the un-shaded portions of the following chart by checking the appropriate box below and entering the appropriate Entity I.D. Number, if applicable (for an explanation of what an entity number is, please see paragraph C below):

Type of Ownership (check appropriate box)	Entity I. D. Number & Applicable State
<input type="checkbox"/> Individual or Sole Proprietorship	Not Applicable
<input type="checkbox"/> General Partnership	Not Applicable
<input type="checkbox"/> Limited Partnership (LP)	Number & State:
<input type="checkbox"/> Limited Liability Partnership (LLP)	Number & State:
<input type="checkbox"/> Limited Liability Company (LLC) (Single Member)	Number & State:
<input type="checkbox"/> LLC (Multi-Member)	Number & State:
<input checked="" type="checkbox"/> Corporation	Number & State: 630 Plaza Drive, Suite 100 Highlands Ranch, CO 80129
<input type="checkbox"/> Other, please explain:	Number & State (if a filing entity under state law):

**C. Entity I.D. Numbers.** If an Entity I.D. Number is required and if the business entity is registered in this state, the number is available through the website of Alabama's Secretary of State at: [www.sos.state.al.us/](http://www.sos.state.al.us/), under "Government Records". If a foreign entity is not registered in this state please provide the Entity I.D. number (or other similar number by whatever named called) assigned by the state of formation along with the name of the state.

**D. Formation Documents.** Please note that, with regard to entities, the entity's formation documents, including articles or certificates of incorporation, organization, or other applicable formation documents, as recorded in the probate records of the applicable county and state of formation, are not required unless: (1) specifically requested by the City, or (2) an Entity I.D. Number is required and one has not been assigned or provided.

Please date and sign this form in the space provided below and either write legibly or type your name under your signature. If you are signing on behalf of an entity please insert your title as well.

Signature:  Title (if applicable): Vice President

Type or legibly write name: Jerrv D. Jones Date: April 11, 2013

**ATTACHMENT 3**  
**CITY OF HUNTSVILLE STANDARDS AND DESIGN GUIDES**

1. City of Huntsville Standard Specifications for Construction of Public Improvements. Contract Projects, 1991.
2. City of Huntsville Engineering Standards, 1991.
3. City of Huntsville Design and Acceptance Manual for Force Mains and Pump Stations, 2011.
4. City of Huntsville Design and Acceptance Manual for Sanitary Sewers, 2011.
5. Alabama Department of Transportation Standard Specifications for Highway Construction, Current Edition.
6. City of Huntsville Subdivision Regulations, 1991.

**ATTACHMENT 4**  
**DESIGN REVIEWS**

**0% COMPLETE – PRE-DESIGN CONFERENCE**

The ENGINEER shall meet with the OWNER at a 0% complete - Pre-Design Conference. The OWNER's representative (Project Engineer) will be introduced.

**CONFERENCE FORMAT**

The pre-design meeting will be initiated by the OWNER. The purpose of the conference will be to give the ENGINEER an opportunity to discuss the design of the PROJECT, to visit the PROJECT site, to receive copies of OWNER -furnished documents, if applicable, and to meet the OWNER'S Project Engineer and other personnel working on the PROJECT.

**ATTENDEES:** (Required)

- ENGINEER
- ALDOT (as appropriate for the type of project)
- Real Estate
- Landscape Management
- Utilities
- Traffic Engineering
- Planning

**DISCUSSION TOPICS :**

- Authority of OWNERS representative (Written submittal made to the ENGINEER)
- Tree Ordinance
- Scope of Work
- Time Requirements
- Budget Restraints
- Testing Requirements
- Permit Responsibilities
- Design criteria
- LC&E requirements
- Plan Requirements
- Special Conditions
- Utility Project Notification and a list of all utilities that need to be contacted.

**REQUIRED SUBMITTALS TO THE PROJECT ENGINEER**

1. A Certificate of Insurance for the ENGINEER and the ENGINEER's subconsultants shall be submitted to the OWNER's PROJECT ENGINEER per Section 10.6.
2. Prior to the Pre-Design Conference, a completed **draft** design criteria document shall be prepared to the best of the ENGINEER'S ability and in conformance with his fee proposal and will serve as the basis of a discussion topic during the Pre-Design Conference. A **final** version of the design criteria based upon discussion during the meeting shall be prepared by the ENGINEER and distributed with the meeting minutes. A copy of a design criteria format may be found on the City of Huntsville web site at <http://www.huntsvilleal.gov/engineering/index.php>.
3. Within seven (7) calendar days of the 0% Complete - Pre-Design Conference, the ENGINEER shall submit to the OWNER's Project Engineer two color copies and an electronic copy of a schedule in Microsoft Projects format showing the critical path and indicating the time frame for the required milestone events and submittals outlined in this document. The schedule shall support a PROJECT completion date in accordance with the Period Of Services in Article 6. When approved, a baseline of the schedule shall be saved from which variances in the schedule can be measured and evaluated.

**ATTACHMENT 4**  
**DESIGN REVIEWS**

**30% COMPLETE – CONCEPTUAL DESIGN**

This design review is to show the OWNER how the functional and technical requirements will be met, to indicate the ENGINEER's approach to the solution of technical problems, to show compliance with design criteria or to justify noncompliance and to provide an estimate of probable cost. A field review shall be conducted at this juncture with the OWNER's staff and the ENGINEER to review the proposed field alignment of the PROJECT.

**CONFERENCE FORMAT**

**ATTENDEES: (Required)**

- Real Estate
- Landscape Management
- Utilities
- Traffic Engineering
- Planning
- City of Huntsville Construction Project Manager
- City of Huntsville Inspector
- City of Huntsville Environmental Representative

**DISCUSSION TOPICS:**

- ENGINEER presents recommended design/solutions along with other options and alternatives considered.
- ENGINEER presents updates on progress of permitting requirements
- ENGINEER presents progress on coordination with other project participants such as the State of Alabama, sub consultants, etc.
- ENGINEER presents budgetary constraints

**REQUIRED SUBMITTALS TO THE PROJECT ENGINEER**

1. A preliminary list of all permits to be obtained with associated fees.
2. An updated schedule in Microsoft Projects format showing the critical path shall be submitted.
3. Two color copies and an electronic copy of an updated schedule in Microsoft Projects format showing the critical path shall be submitted.

**ATTACHMENT 4**  
**DESIGN REVIEWS**

**60% COMPLETE – PRELIMINARY DESIGN CRITERIA**

The review of the PROJECT at this point is primarily to insure that funding limitations are not being exceeded and to insure that the contract documents, design analysis and cost estimates are proceeding in a timely manner, and that the design criteria and previous review comments are being correctly interpreted. An additional review may be required by the OWNER to review changes proposed from previous submittals.

**CONFERENCE FORMAT**

**ATTENDEES:** (Required)

- Real Estate
- Landscape Management
- Utilities
- Traffic Engineering
- Planning
- City of Huntsville Construction Project Manager
- City of Huntsville Inspector
- City of Huntsville Environmental Representative

**DISCUSSION TOPICS:**

- Additional land acquisition needs, as required.
- Utility Project Notification and a list of all utilities that need to be contacted.
- Technical specifications for special construction items not covered under standard specifications or deviations from standard specifications.
- Update on progress of permitting requirements.
- Erosion control plan requirements, if required by the OWNER.
- Budget constraints.
- Progress on coordination with other project participants such as the City of Huntsville Real Estate Officers (Engineering Department), State of Alabama, sub consultants, etc.

**REQUIRED SUBMITTALS TO THE PROJECT ENGINEER**

1. One full size print copy and one ½ size print copy of all drawings that have incorporated previous comments shall be submitted. Plan/Profile drawings shall be 75% complete. Right-of way drawings shall be 100% complete at this submittal (reference Real Estate Division Plan Requirements Section entitled DRAWINGS, included at the end of this proposal)
2. An update to the schedule in Microsoft Projects format showing the critical path shall be submitted.
3. Unless determined to be inapplicable by the OWNER, Hydraulic reports 75% complete, shall be submitted.
4. Three (3) copies of preliminary plans for utilities shall be submitted.
5. Legal descriptions for takings shall be submitted. The information shall be 100% complete. (reference Real Estate Division Plan Requirements Section entitled DESCRIPTIONS, included at the end of this proposal)
6. Traffic Control Plan, if required. Plan shall be 60% complete at this submittal.
7. Detailed preliminary construction cost estimate shall be submitted.
8. Results of geotechnical investigations shall be submitted.
9. A list of comments made at the 30% review and a summary of each resolution.
10. Two color copies and an electronic copy of an update to the schedule in Microsoft Projects format showing the critical path shall be submitted.

**ATTACHMENT 4**  
**DESIGN REVIEWS**

**90% COMPLETE – FINAL REVIEW**

The review of this submittal is to ensure that the design is in accordance with directions provided the ENGINEER during the design process.

**CONFERENCE FORMAT**

**DISCUSSION TOPICS**

Discussion topics will be handled open forum.

**REQUIRED SUBMITTALS TO THE PROJECT ENGINEER**

1. One full size print copy and one ½ size print copy of all drawings that have incorporated previous comments shall be submitted. Submittals include Plan/Profile drawings, Construction Details, Detailed cross-sections with cut and fill quantities and storm and sanitary sewer crossings, Erosion control plan, if required, Technical specifications, Right-of way drawings, Traffic Control Plan, Plans for Utilities, Signed Acceptance of Utility Project Notification Form by all affected parties, Design Calculations, and a final cost estimate. All submittals shall be 100% complete.
2. Any changes to Land Acquisition needs shall be identified and Legal descriptions for the changes shall be submitted.
3. A list of comments made at the 60% review and a summary of each resolution.
4. Calculations showing how quantities were determined for each bid item and how the item is to be measured in the field and paid. Three bound copies of corrected quantity calculations to match bid quantities. The following shall be required for each item:
  - Item Number
  - Item Description with standard specification used
  - Detailed calculation to include all measurements, conversion factors, and “standard” weights used
  - Final “calculated” amount and any “increased” amounts
  - Notes to include any deviation from referenced standard specifications

**ATTACHMENT 4**  
**DESIGN REVIEWS**

**100% COMPLETE – READY TO ADVERTISE**

After the 90% review, the ENGINEER shall revise the construction documents by incorporating any comments generated during the previous design reviews. The ENGINEER shall prepare final hard copy contract specifications, prepare a bid form, and update the cost estimate as necessary.

**CONFERENCE FORMAT**

This is a submittal only. **Return this sheet with submittal**

<b><u>YES</u></b>	<b><u>NO</u></b>	<b>REQUIRED SUBMITTALS TO THE PROJECT ENGINEER</b>
<input type="checkbox"/>	<input type="checkbox"/>	1. Two (2) sets of complete construction drawing prints sized 24" x 36" sealed and marked "ISSUED FOR CONSTRUCTION". Drawings information shall be referenced to Alabama State Plane Coordinate system, NAD1983 Alabama East Zone as described in the <u>Code of Alabama</u> (1975), Section 35-2-1. Surveys shall be tied to a minimum of two accepted GPS monuments or one GPS tie point plus an astronomic observation to determine grid north or GPS Survey.
<input type="checkbox"/>	<input type="checkbox"/>	2. One (1) Micro station digital and One (1) digital file in either .tiff or .pdf format of construction drawings (must be signed and sealed) – sized 11" x 17".
<input type="checkbox"/>	<input type="checkbox"/>	3. Two (2) sets of right-of-way drawing prints sized 24" x 36" sealed and marked "ISSUED FOR CONSTRUCTION". Drawings information shall be referenced to Alabama State Plane Coordinate system. NAD1983 Alabama East Zone
<input type="checkbox"/>	<input type="checkbox"/>	4. One (1) Micro station digital file of right-of-way drawings.
<input type="checkbox"/>	<input type="checkbox"/>	5. Two (2) print sets of 8-1/2" x 11" legal descriptions for right-of-way (REVISED SETS ONLY)
<input type="checkbox"/>	<input type="checkbox"/>	6. One (1) digital text file of legal descriptions for right-of-way (REVISED FILE ONLY)
<input type="checkbox"/>	<input type="checkbox"/>	7. One (1) print copy of Final Construction Cost Estimate.
<input type="checkbox"/>	<input type="checkbox"/>	8. One (1) digital spread sheet file of Final Construction Cost Estimate.
<input type="checkbox"/>	<input type="checkbox"/>	9. Three (3) printed and bound copies of corrected quantity calculations to match Final Bid Quantities.
<input type="checkbox"/>	<input type="checkbox"/>	10. One (1) digital spread sheet file (Excel 2003 format) of Final Bid Quantities.
<input type="checkbox"/>	<input type="checkbox"/>	11. Two (2) print sets of contract specifications.
<input type="checkbox"/>	<input type="checkbox"/>	12. One (1) digital text file of contract specifications.
<input type="checkbox"/>	<input type="checkbox"/>	13. One (1) complete set of signed and sealed calculations.
<input type="checkbox"/>	<input type="checkbox"/>	14. One (1) complete set of all approved permits including Location, Character, and Extent, COE, ADEM, etc.
<input type="checkbox"/>	<input type="checkbox"/>	15. One (1) complete set of all field notes.
<input type="checkbox"/>	<input type="checkbox"/>	16. One (1) copy of digital aerial photography obtained for this PROJECT in (.tif) format, as necessary.
<input type="checkbox"/>	<input type="checkbox"/>	17. Utility Project Notification forms and a list of all utilities that need to be contacted.

\_\_\_\_\_  
Engineer

## ATTACHMENT 5 - ENGINEERS PERSONNEL FEE SCHEDULE

### Hourly Rate Schedule

This document describes the basis for compensation and terms of payment. All rates presented apply to services rendered after January 1, 2013 and will be adjusted annually thereafter.

In addition to these fees, clients will also be responsible for any sales or value-added taxes that may apply to engineering services performed.

**Hourly Rates:** Charges for services provided will be in accordance with the following schedule:

2013 CONV	
CADD Technician	40
Survey Technician	60
Design Tech II/Field Technician II	67
Survey Crew Chief	70
Drafter I/Field Technician III and IV	80
Drafter II/Field Technician V	91
Document Tech	115
Professional Land Surveyor	120
Project Assistant I and II	128
CADD Designer /Field Supervisor	177
Engineer/Scientist	119
Staff Engineer/Scientist/Architect	134
Project Engineer/ Scientist/Architect	144
Senior Engineer/ Scientist/Architect I	149
Senior Engineer/Scientist/Architect II	178
Principal Engineer/Scientist/Architect I	223
Principal Engineer/Scientist/Architect II	255
Engineer/Scientist Director	271

**Other Direct Costs:** All expenses incurred for a project, except in-house services specified below, from outside vendors will be invoiced at cost plus 10% to cover administrative expenses. These items may include, but are not limited to: shipping charges; printing; supplies; equipment; traveling expenses; special insurance; licenses; permits; or subcontractors.

**In-house services consist of:**

- Transportation - \$0.62 per mile for vehicles.
- Equipment - a schedule of usage rates for specialty equipment is available for field assignments
- Web Hosting - a schedule of monthly web hosting rates is available for client access web sites

**Payment:** All invoices are due and payable within 30 days of billing date. Any attorney's fees, court costs, or other related expenses incurred in collecting delinquent accounts shall be paid by the client. Delinquent bills are subject to finance charges of 1.5% per month.

Rates will be adjusted on an annual basis in accordance with the CPI-U index +1%.

**ATTACHMENT 6 - PROGRESS REPORT**  
**(Article 8)**

PROGRESS REPORT NO. \_\_\_\_\_ FOR MONTH AND YEAR \_\_\_\_\_

PROJECT \_\_\_\_\_ PROJECT NO. \_\_\_\_\_

DATE \_\_\_\_\_ CITY'S PROJECT ENGINEER \_\_\_\_\_

CONSULTANT \_\_\_\_\_ CONSULTANT'S PROJ. MAN. \_\_\_\_\_

CURRENT MONTH % COMPLETE: \_\_\_\_\_ PREV. MONTH % COMPLETE: \_\_\_\_\_

ATTACH A "SHOULD HAVE STARTED TASKS REPORT" AND A "SLIPPING TASKS REPORT" FROM MICROSOFT PROJECTS THAT LISTS ALL ACTIVITY THAT IS BEHIND SCHEDULE.

ATTACH A "TASKS STARTING SOON" REPORT FROM MICROSOFT PROJECTS WITH A DATE RANGE OF THIRTY (30) DAYS AFTER THE DATE OF THIS PROGRESS REPORT.

STATE WHAT ACTION IS BEING TAKEN TO BRING PROJECT BACK TO SCHEDULE:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

MILESTONE SUBMITTALS	SCHEDULED DATE	ACTUAL DATE
30%	_____	_____
60%	_____	_____
90%	_____	_____
100%	_____	_____
"FINAL" INVOICE SUBMITTED		_____
SUBCONSULTANTS PAID IN FULL		_____
CONTRACTED COMPLETION DATE: November 26, 2013		_____

(These scheduled dates shall be agreed upon at the beginning of the project (Attachment 4) with the Project Engineer and noted monthly on each progress report. The scheduled contract completion date shall not be changed except by contract change order. Changes to the scheduled milestone submittal dates shall be accompanied by a new project schedule approved by the OWNER'S Project Engineer.)

UPDATED SCHEDULE ATTACHED? \_\_\_\_\_ YES \_\_\_\_\_ NO

\*If yes, send an electronic copy to the Project engineer

COMMENTS:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

This progress report (4 copies) shall be submitted monthly. Scheduled completion dates will not be extended without a contract modification.

CERTIFICATION: I certify that the stated information is true and accurate to the best of my knowledge.

\_\_\_\_\_  
CONSULTANT

\_\_\_\_\_  
DATE

\_\_\_\_\_  
CITY PROJECT ENGINEER DATE

**ATTACHMENT 7 - SUB CONSULTANTS ENGAGED BY THE ENGINEER**  
**(Article 9.2)**

<b>CONSULTANT NAME AND ADDRESS</b>	<b>DESCRIPTION OF SERVICES</b>	<b>FEE</b>
Garrett & Associates Appraisals, Inc. 2515-B Memorial Parkway, South Huntsville, AL 35801	Consulting Services	\$5,700.00
M. J. Connors Consulting	Professional Consulting Services	\$6,650.00
	<b>SUB-TOTAL</b>	\$12,350.00
	<b>5% Administrative Fee</b>	\$650.00
	<b>TOTAL</b>	\$13,000.00

**ATTACHMENT 8 - CONTRACT DOCUMENT REQUIREMENTS LIST**

<b>REQUIREMENT</b>	<b>SUBMIT TO</b>	<b>SUBMITTAL REQUIREMENT DATE</b>	<b>NUMBER OF COPIES</b>	<b>REFERENCE SECTION OF CONTRACT AND COMMENTS</b>
Deviations from OWNER's standards.	OWNER	Prior to incorporating deviations.	2	Article 2.5
Products or materials specified by the ENGINEER that are available from only one source.	OWNER	Prior to 100% submittal.	2	Article 2.2
Approval of ENGINEER's Request for Payment.	OWNER	Within ten (10) days of receipt of the request from the ENGINEER.	N/A	Article 3.4
Approval of ENGINEER submittals	OWNER	So as to cause no delay to the ENGINEER or the PROJECT.	N/A	Article 3.8
Change order changes that reduce construction requirements.	OWNER	Prior to authorizing a change.	N/A	Article 3.11
Any information pertaining to any claim.	OWNER	Immediately	2	Article 3.12
Information pertinent to the PROJECT, all criteria and full information as to OWNER's requirements, copies of all design and construction standards.	ENGINEER	So as to not delay the services of the ENGINEER.	2	Article 5.1, 5.2
Notification of delays.	ENGINEER; OWNER	Promptly	4	Article 6.1
ENGINEER's monthly invoices.	OWNER	Monthly	4	Article 8.1.1
Consultant progress report.	OWNER	Monthly	4	Article 8.1.1
Records, data, parameters, design calculations and other information.	OWNER	Cancellation of contract.	2	Article 9.7
Documentation, records of reimbursable expenses, record copies of all written communications, and any memoranda of verbal communications related to the PROJECT.	OWNER	Upon notice from the OWNER.	2	Article 9.4
Termination notification.	OWNER or ENGINEER	7 days prior to termination.	2	Article 9.10 & 9.11
Certificate of Insurance for ENGINEER.	OWNER	At 0% design conference	1	Article 10.2(B), 10.6, and Attachment 4.
Insurance cancellation, suspension, or reduction in coverage or limits.	OWNER	30 days prior to effective date except for cancellation which is 10 days notification.	1	Article 10.4(A)

Certificate of insurance for sub consultants/subcontractors.	OWNER	At 0% design conference.	1	Article 10.7
A schedule in Microsoft Projects format showing the critical path.	Project Engineer	Within 7 calendar days of Pre-design conference, 30% complete design review. 60% design review. Attachment 6	1 hard; 1 digital	Attachment 4
Drawings.	Project Engineer	30% complete design review, 60% design review, 90% review, and 100% complete.	3	Attachment 4
Cost estimate.	Project Engineer	30% complete design review, 60% review, 90% review, and 100% complete.	3	Attachment 4
Hydraulic reports.	Project Engineer	60% design review.	2	Attachment 4
Preliminary plans for utilities.	Project Engineer	60% design review.	3	Attachment 4
Real Estate Deliverables	Project Engineer	60% design review, 90% review, 100% complete.	Reference Real Estate Division Plan Requirements	Attachment 4, 14 Real Estate Plan Requirements at end of this proposal document
Traffic Control plan.	Project Engineer	60% design review.	N/A	Attachment 4
Results of geotechnical investigations.	Project Engineer	30% design review.	2	Attachment 4
Technical specifications.	Project Engineer	90% review, 100% complete.	N/A	Attachment 4
Relocation of Utilities	Project Engineer	0% review – list of all utilities that need to be contacted 60% review – from all affected parties 90% review – Signed Acceptance Utility Project Notification Form	2	Attachment 4, 10
Design Calculations	Project Engineer	90% review, 100% complete	1	Attachment 4
Digital copy of drawings.	Project Engineer	100% complete – 1 in .dgn format; 1 in .tiff or .pdf format	2	Attachment 4
Digital text files.	Project Engineer	100% complete.	1	Attachment 4
Bid Quantities.	Project Engineer	100% complete. Digital in Excel 2003 format and hard copy	3	Attachment 4
Permits and Permit Applications	Project Engineer	100% complete.	1	Attachment 4
Field notes.	Project Engineer	100% complete.	1	Attachment 4
Digital aerial photography.	Project Engineer	100% complete.	1	Attachment 4
Progress Report (Art. 8)	Project Engineer	30% complete design review, 60% design review, 90% design review, 100% completion stage.	4 hard; 1 digital monthly	Attachment 4

## **ATTACHMENT 9 - REQUIREMENTS FOR DOCUMENT SUBMITTALS**

All drawings shall be sized 24" x 36", unless otherwise approved by the OWNERS Project Engineer.

Title blocks shall as a minimum, contain the name of the project, date, city project number, and ENGINEER's name. The title block of drawings shall contain a space for the names of the preparer and the reviewer and/or checker. These blocks shall be signed on each submittal (See Attachment "11" for sample standard drawing format). Drawings shall contain alphanumeric revision designations. Drawings issued for review shall be issued with alpha revision designation and the revision letter shall be changed for each submittal containing drawing changes. Drawings issued for construction shall be issued with numeric designation at revision level "0" and described as "Issued for Construction" in the revision description block. Subsequent drawing changes require the revision level to be raised using successively higher numbers and the changes to be marked by circling and briefly described in a revision block.

Unless otherwise specified by the Owners Project Engineer, all drawings for review submittals shall be full or half-size copies. All documents shall be clearly marked in a revision block indicating the applicable submittal milestone, i.e. 30%, 60%, 90%, etc.

Submittals required by the State of Alabama for their review, bidding, etc., shall be of the size, form and numbers of copies as the state may require even though such submittals may differ from the submittals set forth as being required elsewhere in this Agreement.

All drawings shall be prepared in Micro station .DGN format, unless otherwise approved by the OWNERS Project Engineer. Transmittal letters shall consist of a list of files being submitted, a description of the data in each file, and a level/layer schematic of each design file. DGN design files shall have working units as follows: master units in feet, no sub-units, and 1,000 positional units. All data submitted shall use NAD 1983 Alabama East Zone horizontal datum and NAVD 88 vertical datum coordinates.

Digital files shall be submitted by 4-3/4" CD ROM, DVD, 3 and 1/2 inch floppy disk, or to the City of Huntsville F.T.P. site.

All print copies shall be first generation copies.

All text documents shall be prepared in Microsoft Word 2010 format.

All spreadsheets shall be in Microsoft Excel 2010 format.

A schedule showing the critical paths shall be in Microsoft Projects format, unless otherwise approved by the OWNERS Project Engineer.

Aerial photography files shall be in Intergraph (.COT) or (.tiff) format.

All mapping shall meet National Map Accuracy Standards unless otherwise noted. If National Map Accuracy Standards are not met, the accuracy of the map shall be identified to the Owners Project Engineer and on the maps derived from the aerial survey. National Map Accuracy Standards are shown below. This and other map standards are shown in Department of the Army, US Army Corps of Engineers standard, "EM 1110-1-1000, Engineering and Design - Photogrammetric Mapping". <http://140.194.76.129/publications/eng-manuals/em1110-1-1000/toc.htm>

**ATTACHMENT 10 – UTILITY PROJECT NOTIFICATION FORM**

NAME: \_\_\_\_\_  
(Utility Name)

PROJECT NAME: \_\_\_\_\_ PROJECT NUMBER: \_\_\_\_\_

CONSULTING ENGINEER: \_\_\_\_\_  
(Name)

ENGINEERING REPRESENTATIVE \_\_\_\_\_ PHONE: \_\_\_\_\_

I have reviewed design drawings or other information as available, and:

DO \_\_\_\_\_

DO NOT \_\_\_\_\_

have facilities that will require relocation. If relocation is required, a construction duration of \_\_\_\_\_ calendar days from the Notice to Proceed, is anticipated to be required for relocation.

LIST NAME(S) OF OTHER UTILITY(S) that share poles or facilities that have to be relocated prior to **YOU** starting your work:

NAME OF UTILITY: \_\_\_\_\_

NAME OF UTILITY: \_\_\_\_\_

NAME OF UTILITY: \_\_\_\_\_

OTHER: \_\_\_\_\_

COMMENTS: \_\_\_\_\_

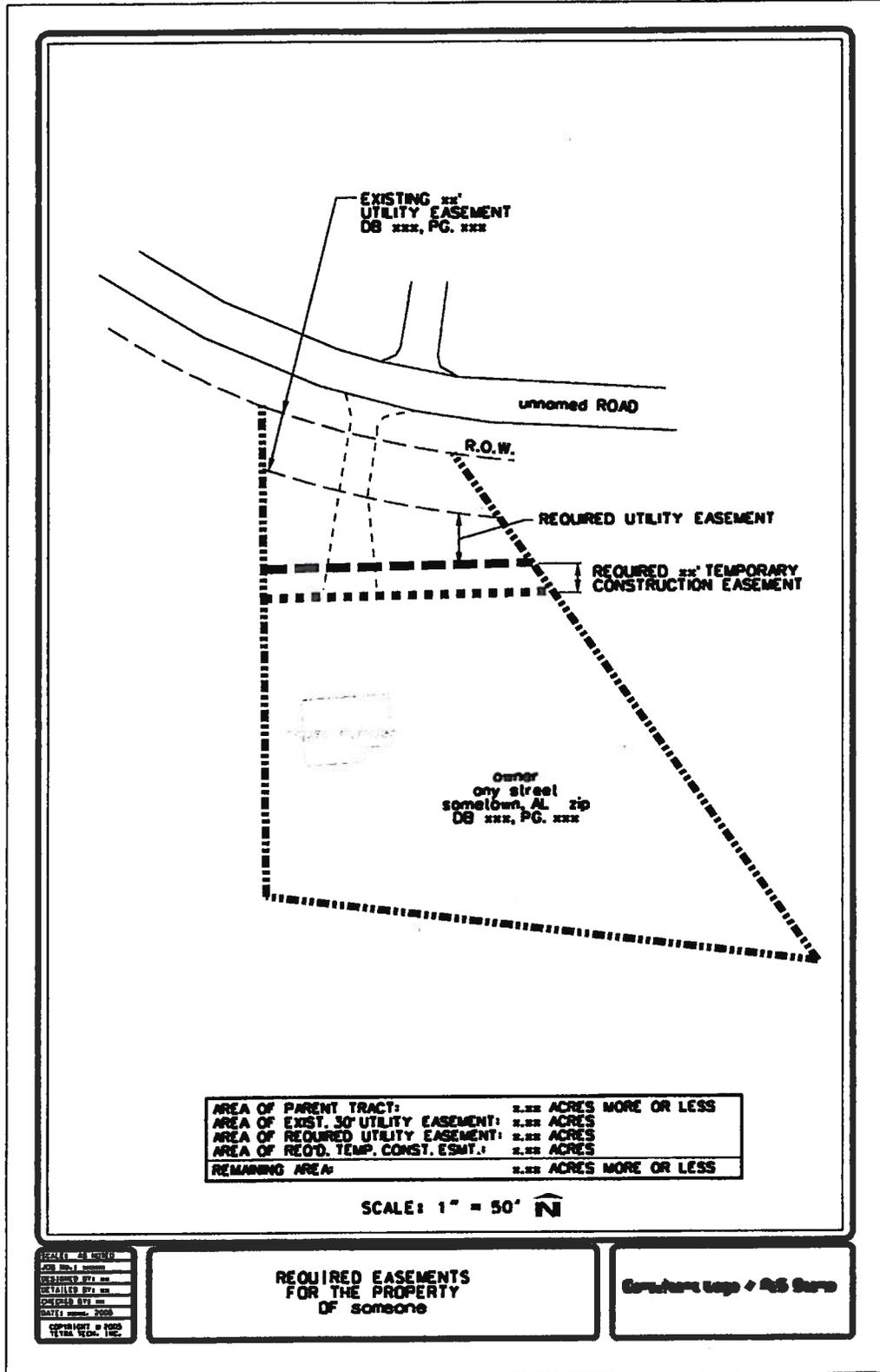
BY: \_\_\_\_\_  
AUTHORIZED REPRESENTATIVE

FIELD CONTACT PERSON: \_\_\_\_\_ PHONE: \_\_\_\_\_  
OFFICE CONTACT PERSON: \_\_\_\_\_ PHONE: \_\_\_\_\_

DATE: \_\_\_\_\_



**ATTACHMENT 12  
SAMPLE**



## **ATTACHMENT 13**

### **United States National Map Accuracy Standards**

*With a view to the utmost economy and expedition in producing maps which fulfill not only the broad needs for standard or principal maps, but also the reasonable particular needs of individual agencies, standards of accuracy for published maps are defined as follows:*

1. **Horizontal accuracy.** *For maps on publication scales larger than 1:20,000, not more than 10 percent of the points tested shall be in error by more than 1/30 inch, measured on the publication scale; for maps on publication scales of 1:20,000 or smaller, 1/50 inch. These limits of accuracy shall apply in all cases to positions of well-defined points only. Well-defined points are those that are easily visible or recoverable on the ground, such as the following: monuments or markers, such as bench marks, property boundary monuments; intersections of roads, railroads, etc.; corners of large buildings or structures (or center points of small buildings); etc. In general what is well defined will be determined by what is plottable on the scale of the map within 1/100 inch. Thus while the intersection of two road or property lines meeting at right angles would come within a sensible interpretation, identification of the intersection of such lines meeting at an acute angle would obviously not be practicable within 1/100 inch. Similarly, features not identifiable upon the ground within close limits are not to be considered as test points within the limits quoted, even though their positions may be scaled closely upon the map. In this class would come timber lines, soil boundaries, etc.*
2. **Vertical accuracy,** *as applied to contour maps on all publication scales, shall be such that not more than 10 percent of the elevations tested shall be in error more than one-half the contour interval. In checking elevations taken from the map, the apparent vertical error may be decreased by assuming a horizontal displacement within the permissible horizontal error for a map of that scale.*
3. **The accuracy of any map may be tested** *by comparing the positions of points whose locations or elevations are shown upon it with corresponding positions as determined by surveys of a higher accuracy. Tests shall be made by the producing agency, which shall also determine which of its maps are to be tested, and the extent of the testing.*
4. **Published maps meeting these accuracy requirements** *shall note this fact on their legends, as follows: "This map complies with National Map accuracy Standards."*
5. **Published maps whose errors exceed those aforestated** *shall omit from their legends all mention of standard accuracy.*
6. **When a published map is a considerable enlargement** *of a map drawing (manuscript) or of a published map, that fact shall be stated in the legend. For example, "This map is an enlargement of a 1:20,000-scale map drawing," or "This map is an enlargement of a 1:24,000-scale published map."*
7. **To facilitate ready interchange and use of basic information for map construction** *among all Federal mapmaking agencies, manuscript maps and published maps, wherever economically feasible and consistent with the uses to which the map is to be put, shall conform to latitude and longitude boundaries, being 15 minutes of latitude and longitude, or 7.5 minutes, or 3-3/4 minutes in size.*

U.S. BUREAU OF THE BUDGET

## ATTACHMENT 14

### ENGINEERING DEPARTMENT - REAL ESTATE DIVISION PLAN REQUIREMENTS

#### **DRAWINGS:**

##### Individual Parcels

- Each individual parcel 8 ½" x 14" (dgn or dxf format)
- Show Calculations
  - Before
  - After
  - Taking
- ***All Parcels shall be closed shapes (polygons).***
- Show Existing and Proposed Right-of-Way on each individual parcel map.
- Property Ownership

##### Overall Project Land Acquisition Maps

- Total project drawing in dgn or dxf format
- Indicate the following:
  - Stationing on Centerline
  - Existing Right-of-Way
  - Proposed Right-of-Way
  - Existing Easements
  - Proposed Easements
  - Existing Pavement
  - Proposed Pavement/Sidewalks/Structures
  - Existing Structures
  - Property Ownership

##### Color Standards

*(SAMPLE)*

<u>Description</u>	<u>Color</u>	<u>Line Style</u>	<u>Type</u>
Existing ROW	Red	Medium Dashed	
Proposed ROW	Red	Solid	Closed Polygon
Existing Easements	Orange	Medium Dashed	
Proposed Easements	Orange	Solid	Closed Polygon
TCE	Pink	Solid	Closed Polygon

#### **DESCRIPTIONS:**

- Microsoft Word on 3.5" Diskette or CD
- Each Description shall be complete and independent (separate file).
- Hard Copies signed and stamped by PLS.

#### **GENERAL:**

- P.K. Nails or other permanent stationing markings shall be required.
- Re-staking of right-of-way or easements may be required (See Article 4).
- All survey plats to be on Alabama State Plane Datum. Strip Maps shall indicate at least 2 monuments in place with Alabama State Plane Coordinate values shown on each.
- Parcel plats and legal descriptions shall indicate the Alabama State Plane Coordinate NAD83 Alabama East Zone Value of the point of beginning.

**ATTACHMENT 15 - GIS BASE MAP**

DESIGN LEVEL	CONTENTS	LINE CODE	COLOR	WEIGHT	TEXT SIZE	FONT	CELL NAME
1	State Plane Coordinate Grid	0	0	0	20	0	
2	Benchmarks	0	0	0			
3	Private Street Text	0	105	0	20	0	
3	Street Text	0	3	0	20 (or 18)	0	
4	Street R/W	7	0	0			
5	Street Centerline	7	0	0			
6	Street Pavement	0	3	0			
6	Proposed Street Pavement	3	16	0			
6	Private Streets	0	105	0			
6	Proposed Private Road	3	105	0			
7	Parking Lots	1	3	1			
7	Private Lots used as Roads	1	105	1			
8	Secondary Roads--Private	2	105	0			
8	Secondary Roads	2	3	0			
8	Trails	3	3	0			
9	Secondary Roads/Trails Text	0	3	0	20	0	
10	Sidewalks	5	3	0			
11	Bridges/Culverts/Paved Ditches	0	0	0			
12	Hydrology - Major	6	1	0			
12	Hydrology - Minor, Ditches	7	1	0			
13	Hydrology - Text	0	1	0	25	23	
14	Tailings & Quarries, Athletic Fields/Text, misc. areas	0	1	0			
15	Greenways	3	48	0			
16	Speed Tables	0	3	0			TCALM
17	Railroad Tracks (Patterned)	0	2	0			RR
18	Railroad Text	0	2	0	25	0	
19	Railroad R/W	2	2	0			
20	Utility Poles (Cell)	0	5	0			P POLE
21	Utility Easements	3	5	0			
22	Utility Text	0	5	1			
23	Geographic Names	0	3	1			
24	Building Structures	0	0	0			
24	Pools and Text	0	1	0	10	1	
24	Future Site of Structures	2	0	0			STRUCT
24	Existing Structures (exact location and shape unknown)	2	0	0			STRCEX
25	Property Lines/ refuge bdy.	6	6	1	30	1	
26	Cadastral Polygons	6	6	0			
27	Ownership Text	0	6	1			
28	Cemeteries/Text	4	6	0	10	1	
29	Lot Numbers				25	0	
30	Block Numbers				30	0	
31	Addition Names	0	0	0	35	0	
32	Open						
33	Lot Ticks						
34	Lot Lines/Property Lines	6	6	0			
35	Trees/Hedge Rows	0	6	0	AS=1		TREES
36	GPS Monuments	0	5	0	18	23	CONTRL

37	2' Topo Contour						
38	5' Topo Contour	0	7	0			
39	25' Major Topo Contour	0	7	0			
40	X Spot Elevation	0	7	0			
41	FEMA Monuments/Labels	0	3/0	0	18	1	FEMA
42	Quarter Sections						
43	Section Lines	0	5	0			
44	Features	0	2	0			
44	Cell Towers	0	12	0	AS=1		CELTWR
45	Fences (Pattern)	0	8	0	AS=1		FENCE
46	Format/Legend	0	0	0			Limleg Madleg
47	Mass Points	0	7	2			
48	Break Lines	0	7	2			
49	Open						
50	Billboards	0	37	1			BBOARD
51	Sanitary Sewer	0		3			
52	Sanitary Sewer Text						
53	Storm Water Features	0		3			
54	Storm Water Text						
55	Open						
56	Property Address	0	1	0			
57	Text Tag for Buildings	0	1	0	10-20	1	
58	One Way Arrows	1	3	1			
59	Open						
60	Open						
61	Open						
62	Monuments for Setup (point cell)						
63	Open						