305 Fountain Circle
Huntsville, AL 35801

Huntsville, Alabama

Cover Memo

Meeting Type: City Council Regular Meeting **Meeting Date:** 8/8/2024 **File ID:** TMP-4447

Department: Engineering

Subject: **Type of Action:** Approval/Action

Resolution authorizing the Mayor to enter into an Agreement between the City of Huntsville, Alabama and Garver, L.L.C., for Engineering Design Services for Pinhook Creek Channel Improvements, Project No. 71-24-BR02.

Resolution No.

Finance Information:

Account Number: 3080-71-00000-525000-BUDGET01-
City Cost Amount: $999,978.00
Total Cost: $999,978.00

Special Circumstances:

Grant Funded: N/A
Grant Title - CFDA or granting Agency: N/A
Resolution #: N/A

Location: (list below)

Address: N/A
District: District 1 ☐ District 2 ☐ District 3 ☐ District 4 ☐ District 5 ☐

Additional Comments:
Design contract with Garver to provide final design plans for PARC project in accordance with federal grant requirements to include surveying, permitting, channel improvements, geotechnical, hardscape and landscape based upon RAISE and NAE grant requirements.

RESOLUTION NO. 24-

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 between the City of Huntsville, Alabama and Garver, L.L.C., in the amount of NINE HUNDRED NINETY-NINE THOUSAND NINE HUNDRED SEVENTY-EIGHT AND NO/100 DOLLARS ($999,978.00) for Engineering Design Services for Pinhook Creek Channel Improvements, Project No. 71-24-BR02, 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 the City of Huntsville, Alabama and Garver, L.L.C., for Engineering Design Services for Pinhook Creek Channel Improvements, Project No. 71-24-BR02," consisting of a total of nineteen (19) pages, plus fifty-four (54) additional pages consisting of Attachments 1-16, and the date of August 8, 2024, 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 8th day of August, 2024.

_____

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

APPROVED this the 8th day of August, 2024.

_____

Mayor of the City of Huntsville,
Alabama

AGREEMENT BETWEEN

CITY OF HUNTSVILLE, ALABAMA

AND

GARVER, L.L.C.

FOR

ENGINEERING DESIGN SERVICES

FOR

PINHOOK CREEK CHANNEL IMPROVEMENTS

Project ID Number 71-24-BR02
August 8, 2024

_____
President of the City Council of the City of Huntsville, Alabama
Date: August 8, 2024

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AGREEMENT BETWEEN

CITY OF HUNTSVILLE, ALABAMA
AND
GARVER, L.L.C.
FOR
ENGINEERING DESIGN SERVICES
FOR
PINHOOK CREEK CHANNEL IMPROVEMENTS
Project ID Number 71-24-BR02

THIS AGREEMENT made as of the 8th day of August in the year 2024, by and between the CITY OF HUNTSVILLE, ALABAMA (hereinafter called OWNER), and GARVER, L.L.C., (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 the design of Pinhook Creek Channel Improvements, 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.

1.4 The engineering professionals performing work on this contract shall perform the services with the professional skill and care ordinarily provided by a competent engineering professional practicing under the same or similar circumstances and professional licenses as expeditiously as is prudent considering the ordinary professional skill and care of a competent engineering professional.

ARTICLE 2 – DESIGN SERVICES OF THE ENGINEER

2.1 ENGINEER shall provide for OWNER Professional Engineering Services for design of Pinhook Creek Channel Improvements.

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 A contract for the professional services of a design professional shall require the design professional to perform the services with the professional skill and care ordinarily provided by a competent design professional practicing under the same or similar circumstances and professional licenses as expeditiously as is prudent considering the ordinary professional skill and care of a competent design professional.

2.5 The ENGINEER shall prepare appropriate bid alternates as necessary in order to assure that the PROJECT can be awarded within the PROJECT budget limitations.

2.6 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.

2.7 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 ENGINEER shall also incorporate into its design, where applicable, Americans with Disabilities Act (ADA) grades, elevations and layout for each handicap ramp within the project. 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.

2.8 The ENGINEER shall obtain all Planning Commission approvals with regard to location, character and extent, as required.

2.9 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.

2.10 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.

2.11 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.

2.12 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) National Adjustment 2011 (NA2011)
Geoid Model:	Geoid18
Units:	US Survey Feet

2.13 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).

2.14 The ENGINEER shall prepare the pre-bid 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 pre-bid meeting, prepare meeting minutes, make clarifications, prepare addendums, and distribute to bidders.

2.15 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 August 9, 2024. The final completion date for the completion of design services as outlined in Article 2 shall be August 9, 2025. The Director of Engineering has the right to grant a time extension of up to 6 months at his/her discretion.

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 LUMP SUM AMOUNT OF NINE HUNDRED NINETY-NINE THOUSAND NINE HUNDRED SEVENTY-EIGHT AND NO/100 DOLLARS ($999,978.00) 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 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 – LUMP SUM AMOUNT OF	$999,978.00
TOTAL CONTRACT AMOUNT:	**$999,978.00**

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. Additionally, invoices for services that are not contracted for as "lump sum" in Article 4 must also be itemized and include, as a minimum, a description of each task performed, the amount of time utilized performing each task, the name(s) of personnel who performed the task and the cost for each specific task. 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 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

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 CHANGES

9.5.1 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.

9.5.2 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.

9.6 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.

9.7 SEAL ON DOCUMENTS

9.7.1 Final plans and drawings shall be marked "ISSUED FOR CONSTRUCTION". When a firm, partnership, or corporation performs the work, each drawing shall be sealed and signed by the licensed engineer or engineers who were in responsible charge of the work.

9.7.2 When plans and drawings issued for construction were not performed by a firm, partnership, or corporation, the first sheet or title page shall be sealed, dated, and signed by the engineer who was in responsible charge. Two or more licensed professional engineers may affix their signatures and seals provided it is designated by a note under the seal the specific subject matter for which each is responsible. In addition, each drawing shall be sealed and signed by the licensee or licensees responsible for each sheet.

9.7.3 When plans or drawings are a site adaptation of a standard design or plan or make use of a standard drawing of others, the ENGINEER shall take measures to assure that the site adaptation, standard drawing, or plan is appropriate and suitable for the use proposed by the ENGINEER including meeting the specific site conditions, functionality, design criteria, safety considerations, etc. After taking such measures, the ENGINEER shall seal the standard drawing or plan as shown above in sections 9.8.1 and 9.8.2. The ENGINEER shall not utilize standards of others without their written consent where written consent is required or implied.

9.7.4 Each sheet of documents, specifications, and reports for engineering practice and of maps, plats, charts, and reports for land surveying practice, shall be signed, sealed, and dated by the licensed engineer or land surveyor who prepared the documents or under whose responsible charge the documents were prepared. Where more than one sheet is bound together in one volume, including but not limited to reports and specifications, the licensee who prepared the volume, or under whose responsible charge the volume was prepared, may sign, seal, and date only the title or index sheet, provided that this sheet clearly identifies all of the other sheets comprising the bound volume, and provided that any of the other sheets which were prepared by, or under the responsible charge of, another licensee, be signed, sealed, and dated by the other licensee.

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. The coverage should include waiver of subrogation.

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. Liability is not necessarily limited to the minimum amounts of insurance required herein, especially where other insurance coverage is available.

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 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. Certificates signed using digital signatures will not be accepted unless accompanied by a written statement from the insurance/surety company indicating that their electronic signature is intended as their signature. 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. 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, judgments and expenses, including, but not limited to, attorney's fees, arising out of or resulting from the performance of the work, caused by any negligent act, error 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.

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

B. Other Than 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, judgments, costs, fees, and expenses (including actual fees and expenses of attorneys, expert witnesses, and other consultants) 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 therefrom actually or allegedly caused by 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.

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 or, 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 FEDERAL IMMIGRATION LAW

By signing this Agreement, the contracting parties affirm, for the duration of the agreement, that they will not violate federal immigration law or knowingly employ, hire for employment or continue to employ an unauthorized alien within the State of Alabama. Furthermore, a contracting party found to be in violation of this provision shall be deemed in breach of the agreement and shall be responsible for all damages resulting therefrom.

11.10 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.

11.11 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.

11.12 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.

11.13 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 sub-consultants shall not offer services to the OWNER'S contractor.

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.

ENGINEER:
GARVER, L.L.C.

BY: _____
Ryan Patton

TITLE: Senior Project Manager

ATTEST: _____

Given under my hand this_____day

Of _____, 2024.

_____
Notary Public

My commission expires_____

OWNER:
CITY OF HUNTSVILLE

BY: _____
Tommy Battle

TITLE: Mayor

ATTEST: _____

Given under my hand this_____day

Of _____, 2024.

_____
Notary Public

My commission expires_____

ATTACHMENT 1-SCOPE OF SERVICES

(Refer to letter dated July 17, 2024, from Wm. Earl Mott, Jr. to Kathy Martin and attachments).

GARVER

5125A Research Drive NW
Huntsville, AL 35805

TEL 256.534.5512
FAX 256.534.5544

www.GarverUSA.com

July 17, 2024

Mrs. Kathy Martin, PE
City Engineer
City of Huntsville
305 Fountain Circle
Huntsville, Alabama 35801

Re: Final Design and Construction Drawings for Pinhook Creek, from Holmes Ave. to Memorial Parkway, Channel Improvements and Landscape Architecture Services

Dear Mrs. Martin:

We appreciate the opportunity to submit this proposal for Engineering and Landscape Architecture Services required for this project. Included herewith is our Labor and Fee Estimate, Fee Proposal, Scope of Services, along with subcontractor proposals.

The Total Estimated Lump Sum Fee that we propose for performing our scope of services is **$ 999,978**. Also included are proposals from our subconsultants, GTEC, Inc for geotechnical services and retaining wall design and their proposed fee is $258,722. LDS, Inc. will be performing Landscape Architecture Services and their proposed fee is $323,234.96. Garver's Total Estimated Lump Sum Fee includes time for coordinating and managing these subconsultants. I would estimate final construction plans to be ready for bid advertisement by October 31, 2024, assuming we receive our NTP immediately. Our fee schedule is valid until January 1, 2025.

Please review these items at your convenience and let me know if you have any questions or need any further information regarding this project or the items submitted. If this proposal meets your approval, we will begin work within five (5) days following approval and execution of our contract with the City. We look forward to working with you and the City of Huntsville on this very important project.

Sincerely,

GARVER

Wm. Earl Mott, Jr., PE
Vice President

Attachments:
Exhibit A – Scope of Services
Exhibit B – Fee Spreadsheet
Exhibit C – Subconsultant Proposal – GTEC
Exhibit D - Subconsultant Proposal – LDS

EXHIBIT A
(SCOPE OF SERVICES)

1. GENERAL

Generally, the scope of services includes surveying, design, bidding services, and construction support services for improvements to ***Pinhook Creek Channel Improvements, in Huntsville, Alabama***. Improvements will consist primarily of channel improvements, stream restoration, retaining walls, pedestrian bridges, hardscapes, landscaping, and lighting. The project corridor begins just north of Holmes Avenue and extends south to a point just north of Memorial Parkway.

2. SURVEYS

2.1. Design Surveys

Garver will provide field survey data for designing the Project, and this survey will be tied to the Owner's control network. The City has provided Garver with microstation drawings prepared by their original consultant, under a separate agreement. Garver has agreed to utilize the files provided by the City with the understanding that some field work will need to be performed to verify the previous work, ensure it's on the appropriate control datums, as well as perform so surveying to fill in gaps that remain from the previous consultants efforts.

2.2. Property Surveys

Garver will locate existing monumentation representing adjacent property boundary along the project corridor, right of ways and/or easements based on record data available. Garver will not be responsible for obtaining and abstract title analyses, the City will contract this work directly as needed. Garver will prepare tract sketches and legal descriptions for 3 parcels affected by the current design. If additional acquisition documents are necessary these can be provided under a separate agreement or as additional services under this agreement.

3. COORDINATION

Garver will furnish plans to all known utility owners potentially affected by the Project at each stage of development. Garver shall conduct coordination meetings among all known affected utility owners to enable them to coordinate efforts for any necessary utility relocations. Garver will include the surveyed locations of the observable and marked utilities in the construction plans. Garver will also include proposed and/or relocated utility information in the construction plans as provided by the utility companies.

Garver will also attend five (5) coordination meetings with the Owner and other agencies as required. Garver will prepare exhibits for these meetings when appropriate.

4. Hydrologic and Hydraulic Design Services

4.1. PART 1 - FLOODPLAIN AND FLOODWAY ANALYSES

The scope of services includes conducting an analysis for channel improvements along Pinhook Creek between Holmes Ave/Dallas Ave NW and Memorial Pkwy SW/Highway 231 in Huntsville, AL. The improvements are Phase I of a multi-phase Pedestrian Access and Redevelopment Corridor (PARC) project. Phase I improvements will consist of channel widening, construction of a greenway for pedestrian access, stream bank stabilization countermeasures, and multiple pedestrian bridge connections between the downtown business district to the Mill Creek and Lowe

Mill communities. This phase has been previously designed, and the scope of services is to evaluate the flood risk reduction, and provide recommendations for pedestrian bridges.

4.1.1. Meetings and Coordination

a. Project kick-off meeting: Upon receiving Notice to Proceed (NTP), Garver will schedule and complete a project kick-off meeting with the Owner and design team members. The focus of this meeting will be to review the project schedule, scope, and immediate next steps. This meeting is expected to take place via video/teleconference and last approximately one (1) hour.
b. Findings Review Meeting: Upon completing the hydraulic analyses and prior to the preparation of the draft hydraulic report, Garver will schedule a meeting with the Owner to review and discuss the findings of the analysis. This meeting is assumed to take place via video/teleconference and last approximately one and a half (1.5) hours.
c. Coordination with the design team, as needed, to adequately reflect any design modifications required for the channel improvements and pedestrian bridge layouts.

4.1.2. Flood Insurance Study (FIS) Data Request

Garver will prepare a FIS data request for the effective technical and administrative support documentation for Broglan Branch, Fagan Creek, Huntsville Spring Branch, and Pinhook Creek within the project approximate project limits. Garver will submit the data request and payment to the FEMA Engineering Library electronically by email to FEMA-EngineeringLibrary@fema.dhs.gov.

4.1.3. Hydrologic Analyses

Garver will review the hydrologic analyses section of the effective FIS for Madison County, AL and any hydrologic data provided as part of the FIS data request. The peak discharges from the FIS for each respective flooding source, within the project limits, will be used to evaluate the proposed project improvements. An updated hydrologic analysis shall not be performed or provided as part of this scope of work.

4.1.4. Hydraulic Analyses

The analysis assumes the FEMA effective hydraulic model(s) is available in the FEMA Engineering Library and will be furnished by FEMA as part of the FIS Data Request. The analyses also presume the effective data is a steady-flow, one-dimensional, georeferenced HEC-RAS hydraulic model(s) as stated in the effective FIS for Madison County, AL revised August 16, 2018.

a. Garver will utilize the effective hydraulic model(s) for Huntsville Spring Branch from near Bob Wallace Ave SW (FEMA Lettered Section I) upstream to the confluence with Pinhook and Fagan Creeks, and Pinhook Creek from its confluence (FEMA Lettered Section A) upstream to near Dallas Avenue/Holmes Avenue (FEMA Lettered Section E) to evaluate the project improvements. The evaluation will follow the Hydraulic Analysis procedures of the FEMA Guidance for Flood Risk Analysis and Mapping MT-2 Request (Guidance Document 106), dated December 2020. The following conditions model(s), as applicable will be developed to support a CLOMR/LOMR application:
    - Duplicate Effective Model
    - Corrected Effective Model
    - Pre-project (Existing) Conditions Model

- Update the effective model with current bridge geometries at Clinton Ave and Holmes Ave.

- Revised or Post-project Conditions Model
  - Garver will prepare the Post-project Conditions Model geometry based on the Pinhook Creek Channel Improvements plans included as Attachment A. The proposed improvements include channel widening and modifications, proposed walls, and pedestrian paths as shown in the preliminary plans.
  - Garver will evaluate Pedestrian Bridge 1 and 2 at locations shown on the attached plans.
  - Based on the anticipated construction sequencing, Garver will evaluate an interim post-project condition for the proposed channel improvements without the proposed railroad bridge replacement immediately upstream of Heart of Huntsville Dr. SW.
  - Garver will evaluate the final proposed channel improvements with the proposed railroad bridge replacement immediately upstream of Heart of Huntsville Dr. SW.
  - The limits of the proposed Phase I improvements along Pinhook Creek extend from Holmes Ave. NW to Memorial Parkway/ US Hwy 231.

b. Garver will perform a floodway analysis using the final Post-project Conditions Model. The floodway analysis will be used to document the surcharge values, widths, and velocities for the channel modifications.

4.1.5. Inundation Mapping

Garver will develop digital floodplain inundation mapping from the 100-, 500-year, and floodway simulations for the final post-project conditions. The mapping will be limited to Huntsville Spring Branch and Pinhook Creek as stated above in Section 4.1.4.

4.1.6. Hydraulic Report

This scope does not include any reporting at this time. Garver can prepare CLOMR/LOMR report and applications under a separate agreement.

4.2. PART 2 - STREAM RESTORATION ANALYSES

The proposed project includes in-stream features to improve water quality, aquatic and terrestrial habitats, and streambank stabilization. The in-stream features will also improve sediment transport in a wide range of flows, provide a more self-sustaining low flow channel which will improve overall stream aesthetics while reducing maintenance needs.

4.2.1. Hydrologic Analyses

Garver will review the stream gage data available online at the USGS Stream Gage No. 03575890 Pinhook Creek at Clinton Ave. at Huntsville, AL. Depending on the period of record and availability of data perform a Bulletin 17B analysis using HEC-SSP to determine estimated peak discharges for the 99% through 5% Annual Exceedance Probability (AEP). These more frequent, less magnitude events will be used to evaluate flows associated with the proposed in-stream features.

Depending on the availability of data recorded at the USGS Stream Gage No. 03575890, Garver will conduct an effective discharge analysis. If sufficient data is not available, this analysis may not be feasible and will not be conducted as part of this scope of work.

4.2.2. Hydraulic Analyses

Garver will develop a HEC-RAS two-dimensional (2D) unsteady flow hydraulic model of Pinhook Creek. The extents of the model will include portions of Huntsville Spring Branch from near Bob Wallace Ave SW (FEMA Lettered Section I) upstream to the confluence with Pinhook and Fagan Creeks, and Pinhook Creek from its confluence (FEMA Lettered Section A) upstream to near Dallas Avenue/Holmes Avenue (FEMA Lettered Section E).

This 2D hydraulic model is intended to be a low flow model detailed enough to evaluate the proposed channel modifications and in-stream features (i.e. spur dikes, rock clusters, vanes, etc.) associated with the stream restoration features. The purpose of the model will be to evaluate the flow depths, velocities, shear stress, and other pertinent hydraulic parameters required for design.

Hydrographs representative of the estimated peak discharges for the 99% through 5% AEP from the USGS Stream Gage Station No. 03575890 will be used to generate the unsteady flow simulations.

The following conditions model(s) will be prepared to evaluate the project:

- Pre-project (Existing) Conditions Model (without project).
- Post-project Conditions Model (with project). Evaluate Alternative 3 Bridge and Channel Modifications identified in the approved Environmental Assessment, dated April 2003, and as currently designed by WSP.
  - Add two pedestrian bridge crossings.
  - Evaluate up to a maximum of two (2) alternative configurations of in-stream features.
- Hydraulic design of in-stream features.

4.2.3. Design Report

Upon completion of the hydraulic analyses and coordination with the City, Garver will prepare a design report for the stream restoration. The following supporting documentation will be included:

- Design narrative
- Design calculations for in-stream features
- Output for pertinent hydraulic parameters
- Schematic details

4.2.4. PROJECT DELIVERABLES

The following will be submitted to the Owner, or others as indicated, by Garver:

A. Summary of design recommendations
B. Electronic hydraulic model files

5. GEOTECHNICAL ENGINEERING SERVICES

Geotechnical Engineering services proposed for this project include subsurface exploration for the channel improvements and retaining wall design. Services also include retaining wall design for proposed ready-rock retaining walls. Also included will be subsurface exploration for the abutment design at the 3 single-span pedestrian bridges proposed for this phase of the project. All the

geotechnical services required for this project will be performed by GTEC,Inc., as a subconsultant to Garver, a more detailed breakdown of the GTEC proposal is included in the Appendices.

6. CHANNEL IMPROVEMENT DESIGN AND CONSTRUCTION DRAWINGS

Garver will perform design modeling, based on the provided 60% drawings and cad files, to be used to finalize the design and prepare comprehensive construction drawings for the proposed channel improvements. Construction drawings will incorporate the stream restoration details, retaining wall designs, channel widening, channel edge reinforcing, channel maintenance access locations, proposed hardscapes, landscaping, irrigation, lighting, and other improvements.

7. CONCEPTUAL DESIGN

The City has provided Garver with pdf and cad files for the 60% plans submitted by the City's previous consultant. For purposes of our design proposal, these previously submitted 60% plans will be accepted by all as the conceptual design for the project. Garver will incorporate comments from the Owner into the Preliminary Design.

8. PRELIMINARY DESIGN

As this is a unique situation, Garver will begin with the 60% drawings, provided by the City, and immediately begin preparing plans for a 90% plans review. For this project, the Preliminary Design phase submittal will include 90% Plans, all supporting reports and documents, and an opinion of probable construction cost. The preliminary design phase will represent approximately 90 percent of final construction contract plans. Garver will incorporate comments from the Owner on the Preliminary Design into the Final Design. Garver will proceed with Final Design after the Preliminary Design is approved by the Owner in writing.

9. FINAL DESIGN

Once Garver receives written approval from Owner on 90% Construction Drawings and Design, Garver will begin Final Design. During the final design phase of the Project, Garver will conduct final designs to prepare construction plans and specifications, for one construction contract, including final construction details and quantities, special provisions, and opinion of probable construction cost. Garver will also make final field inspection with Owner, make any needed plan changes as a result of the final field inspection and/or special easement acquisition considerations, and prepare the construction documents as required to advertise for bids.

10. PROPERTY ACQUISTION DOCUMENTS

Garver will perform property suvey of three (3) impacted parcels of land, in order to prepare tract sketchs and legal descriptions for these three (3) acquisitions. These may include right-of-ways, easments, temporary construction easements, or a combination thereof. Garver is not responsible for any abstract title information, the City will contract this work directly and provide to Garver for use in preparing the tract sketches and legal descriptions.

11. Bidding Services

During the bidding phase of the Project, Garver will:

A. Assist the city in preparation of Advertisement for Bids to newspaper(s) for publication as directed by the Owner. Owner will pay advertising costs outside of this contract.
B. Provide digital copies of sealed construction drawings and bid tabs to distribute to prospective bidders.

C. Support the contract documents by preparing addenda as appropriate.
D. Participate in a pre-bid meeting if necessary.
E. Attend the bid opening.
F. Prepare bid tabulation.
G. Evaluate bids and recommend award.

12. CONSTRUCTION PHASE SERVICES

This scope does not include construction phase services.

13. PROJECT DELIVERABLES

The following will be submitted to the Owner, or others as indicated, by Garver:

A. 1 copy of the Geotechnical Report.
B. Digital copies of the Preliminary Design with opinion of probable construction cost.
C. One digital copy of the Preliminary Plans to each potentially affected utility company.
D. Digital copies of the Final Design with opinion of probable construction cost.
E. Digital copies of the revised Final Design with opinion of probable construction cost.
F. One digital copy of the revised Final Plans to each potentially affected utility company.
G. Three copies of the Final Plans and Specifications to the Contractor.
H. Digital copies of the right-of-way and/or easement acquisition documents.
I. Digital copies of approved shop drawings/submittals from the Contractor.
J. One hard copy set of Record Drawings.
K. Other electronic files as requested.

14. EXTRA WORK

The following items are not included under this agreement but will be considered as extra work:

A. Redesign for the Owner's convenience or due to changed conditions after previous alternate direction and/or approval.
B. Submittals or deliverables in addition to those listed herein.
C. Pavement Design beyond that furnished in the Geotechnical Report.
D. Design of any utilities relocation other than water and sewer.
E. Preparation of a Storm Water Pollution Prevention Plan (SWPPP). The construction contract documents will require the Contractor to prepare, maintain, and submit a SWPPP to DEQ.
F. Environmental Handling and Documentation, including wetlands identification or mitigation plans or other work related to environmentally or historically (culturally) significant items.
G. Services after construction, such as warranty follow-up, operations support, etc.

Extra Work will be as directed by the Owner in writing for an addition fee as agreed upon by the Owner and Garver.

15. SCHEDULE

Garver shall begin work under this Agreement within ten (5) days of a Notice to Proceed and shall complete the work in accordance with the schedule below:

Coordinate days based on Critical Path Milestones

Phase Description	Calendar Days
Creek Studies	30 days from start date (or Owner-provided data)
Geotechnical Engineering	80 days NTP
Surveys – Design and Property	14 days from NTP
Preliminary Design	60 days from NTP
Final Design	30 days from approval of Preliminary Design
Property Acquisition Documents	7 days from approval of Final Design
Construction Phase Services	0 days from Notice to Proceed

Exhibit B

Garver - Estimated Labor Requirements and Anticipated Personnel

Fee Proposal for Professional Land Surveying and Engineering Services for PARC Corridor Phase 1 - Channel Improvements

15-Jul-24

	Senior Project Manager, E-6	Senior Project Manager, E-5	Project Manager, E-5	Project Manager, E-4	Environmental Specialist, ES-2	Project Engineer, E-2	Project Engineer, E-1	Professional Surveyor, S-6	2-Man Survey Crew(GPS)	Inspector, C-3	Inspector, C-1	Technicians, T-2	Technician, T-1	Total
	Scott C. Leach, PE Keith Quick, PE, Ryan Patton, PE	Andy Dinges, PE, PLS	Hydraulics	Roadway / Hydraulics	Environmental	Roadway / Electrical		L. Wade Carpenter, PLS	Field Crew	Inspector	Inspector	CAD Tech	CAD Tech	Estimated
ITEM	@$317/HR	@ $235/HR	@ $235/HR	@ $200/HR	@ $151/HR	@ $150/HR	@ $120/HR	@ $210/HR	@ $235/HR	@ $195/HR	@ $115/HR	@ $120/HR	@ $100/HR	Cost
Land Surveying Services														
QA/QC		4						8						$2,620.00
Control Surveys / Boundary Surveys/Mapping/Legal Descriptions		1						12	40			80		$21,755.00
Topographic Surveys of project area		1						16	80			80		$31,995.00
Utilities Location Surveys		1						4	16			8		$5,795.00
Research Property Deeds and Available Records		1						4				16		$2,995.00
													Land Surveying Subtotal =	**$65,160.00**
Channel Improvement Design and Construction Drawings														
QA/QC/Coordination Meetings	20	20		8										$12,640.00
Channel Improvements, modeling and layout		40		40		80								$29,400.00
Hardscape Layout and Coordination		40		40		80								$29,400.00
Grading and Drainage Plan		40		80		80								$37,400.00
Erosion Control Plan		4		16			80							$13,740.00
Construction Details		4		16			40							$8,940.00
Prepare and Submit 90% Channel Improvement Plans for COH Review		8		40		80	80							$31,480.00
Utility Coordination		8		8										$3,480.00
Prepare and Submit 100% Channel Improvement Plans for COH Review		4		16		40	40							$14,940.00
Quantity Take-offs		2		8		40								$8,070.00
													Channel Improvments and Conetuction Drawings Subtotal =	**$189,490.00**
Civil Engineering Services - Hydraulic Modeling and Studies														
QA/QC/Coordination Meetings	8	8	16	4			16							$10,896.00
Hydrologic & Hydraulic Analyses	2			40			80							$18,234.00
Inundation Mapping				2			16							$2,320.00
Stream Restoration Analysis	16		40		60									$23,532.00
Stream Restoration Design and Scour Analysis	16		80		80									$35,952.00
Coordination with design teams	16		20		50									$18,832.00
													Hydraulic Modeling and Stream Restoration Design =	**$109,756.00**
Electrical Engineering Services														
QC/AD Coordination		16												$3,760.00
Design and Plans preparation for lighting circuits and panel design	40					120								$39,680.00
													Environmental Services Subtotal =	**$34,440.00**
Geotechnical Subsurface Exploration and Pedestrian Bridge Foundations														
QC/QA Coordination		19												$4,465.00
Subsurface exploration and reporting for channel improvements														$89,596.00
Subsurface exploration and reporting for pedestrian bridges(3)														$45,372.00
Retaining Wall Design														$110,880.00
Shear Wave Velocity Testing														$12,874.00
													Conceptual Bridge Subtotal =	**$263,187.00**
Landscape Architecture Services														
QC/AD Coordination		20												$4,700.00
Landscape Architecture, design and plans preparation (by LDS, Inc.)														$254,734.96
Architecture Services (by MGI as a sub to LDS, Inc.)														$54,700.00
Botanist (by Lynne Wennegar as a sub to LDS, Inc.)														$13,800.00
													Land Scape Architectural Services =	**$327,934.96**
													Estimated cost of reproductions/copies/equipment rentals, FEMA FIS Study requests, etc.	**$10,000.00**
Total Hours	118	241	156	318	200	520	352	44	136	0	0	184	0	
Hourly Rate	$317.00	$235.00	$235.00	$200.00	$151.00	$150.00	$120.00	$210.00	$235.00	$195.00	$115.00	$120.00	$100.00	
Cost	$37,406.00	$56,635.00	$36,660.00	$63,600.00	$30,200.00	$78,000.00	$42,240.00	$9,240.00	$31,960.00	$0.00	$0.00	$22,080.00	$0.00	
													Garver Fee Total =	$999,977.96

July 12, 2024

Garver
5125 Research Drive
Huntsville, Alabama 35805

ATTN: Mr. Andrew E. Dinges, PE, PLS

SUBJECT: Proposal for Geotechnical Engineering Study
Pinhook Creek Channel Improvements
Huntsville, Alabama
GTEC Proposal No. 00290-P Rev 2

Ladies and Gentlemen,

GTEC, LLC is pleased to provide this revised proposal for a Geotechnical Engineering Study for the above-referenced project in Huntsville, Alabama. Project information was provided by Mr. Andrew Dinges via email on May 8 and May 15, 2024. During a follow-up meeting with Mr. Andrew Dinges and Ms. Kathy Martin and Mr. Alan Clements with the City of Huntsville, GTEC discussed accessibility and agency review requirements for the project. Our proposal has been revised to address these changes in our understanding of the project requirements. This proposal describes the site and presents a planned scope of services, fee, and anticipated schedule.

GTEC, LLC was established in 2020 with more than 60 years combined experience in geotechnical engineering, environmental consulting, and construction testing services. We value client relationships and strive to provide services for the development of successful projects.

PROJECT INFORMATION

GTEC, LLC understands that Garver has been requested to provide design services for a multimodal corridor located between Holmes Avenue and Lowe Mill District adjacent to Pinhook Creek and Huntsville Spring Branch in Huntsville, Alabama. We understand project plans for Phase I include adding three (3) pedestrian bridges across existing channels and channel improvements. Project plans also include removing and replacing one (1) railroad bridge with a precast, prestressed concrete box girder railroad bridge; however, studies and designs for this structure have already been completed. Future project plans include the construction of a cable-suspended bridge crossing US-431/231; however, studies for that phase of the project are not included in this proposal.

We understand the pedestrian bridges will consist of single-span truss bridges. Based on the interim geotechnical report, we understand the single span pedestrian bridges will likely be

supported on driven h-pile foundations. The pedestrian bridges will have span lengths ranging from about 120 feet to 219 feet as summarized below:

Pedestrian Bridge No.	Approximate Station Location	Approximate Span Length (ft)	Estimated Pile Length Range (ft)
1	23+30	171	39 to 53
2	32+40	178	33 to 41
3	49+00	100	80 to 90

We understand improvements to the channel will include widening the channel, using 4H:1V slopes and modular block gravity retaining walls to tie the proposed channel bottom to the proposed top of channel locations. The permanent flow channel will have short walls with heights on the order of 2.5 feet. The flood channel will have retaining walls ranging in height from 6 feet to 16 feet as summarized below:

Wall Location	Approximate Station Range	Approximate Length (ft)	Height Range (ft)
Left of Centerline Eastern Bank	4+50 to 25+50	2,100	15 to 16
Left of Centerline Eastern Bank	27+50 to 38+40	1,090	14 to 16
Right of Centerline Western Bank	12+50 to 24+20	1,170	6 to 11
Right of Centerline Western Bank	25+00 to 29+20	420	7
Right of Centerline Western Bank	30+10 to 32+10	200	6

We understand Federal Highway Administration (FHWA) funding is anticipated for this project. We understand that funding for the proposed construction will not require GTEC to submit our geotechnical reports for review by the Alabama Department of Transportation (ALDOT); however, we understand ALDOT will perform a cursory review of the geotechnical report. This scope does not meet ALDOT's State of Alabama Geotechnical Manual (Geotechnical Manual) released September 7, 2021. Deviations from ALDOT's Geotechnical Manual include backfilling test borings with soil cuttings instead of grouting and offsetting borings where slopes prohibit access. Our study includes borings at 200-foot intervals alternating at the top and bottom of the retaining walls which deviates from ALDOT's requirements of including borings at 100-foot intervals at the top and bottom of the walls. Proposed rock coring depths at the bridges are based on the depth to competent rock in previous studies at the site. The proposed rock coring depths deviate from ALDOT's requirements for bridge borings.

Geotechnical studies have been previously performed AMEC for the City of Huntsville along portions of Huntsville Spring Branch near the proposed channel. GTEC has previously performed geotechnical drilling and testing for Huntsville Utilities along a portion of the channel. The results of the field and laboratory testing from those studies will be used as supplemental data for the reports for this project. The appended Pinhook Creek Channel Improvements Sampling and Testing Plan includes a list of structures where GTEC plans to use previous boring data to supplement the current study.

SCOPE OF SERVICES

The purpose of our study is to explore the subsurface conditions and groundwater levels in order to provide recommendations for construction planning. To accomplish this objective, we have developed the following scope of services.

Utility Clearance and Property Access

We will contact Alabama One Call prior to the performance of our field services. The utility location services will only mark registered public utility lines; therefore, we will need assistance in locating private lines or underground structures.

Boring locations will be marked using a hand-held GPS unit. If a topographic survey is provided, boring elevations can be estimated by interpolating between contour lines. If more accurate location and elevation are needed, we recommend our boring locations be surveyed.

GTEC understands Garver will be responsible for coordinating with the City of Huntsville for property access during our field activities.

GTEC will perform grading and install temporary culverts to access proposed boring locations in the existing channel. Grading will be performed using natural channel deposits. Upon completion, we will remove the temporary culverts.

Geotechnical Drilling

GTEC proposes to explore the subsurface conditions with twenty-two (22) soil test borings during this study. The location and depth of our proposed borings are summarized on the attached Sampling and Testing Plan. The attached Sampling and Testing Plan also highlights locations where previous boring data, and their associated laboratory test data, will be used to supplement the current study. The attached Proposed Boring Location Plans provides the location and depth of each proposed boring.

Each boring will be advanced to the planned depth, or auger refusal, whichever occurs first. Standard penetration tests (SPT) in accordance with ASTM D1586 will be conducted in conjunction with the soil test borings. The SPT tests will be performed at 2-½ foot intervals in the upper 10 feet and at 5-foot intervals thereafter to boring termination or auger or SPT refusal. Pocket penetrometer readings may be taken on each sample and recorded on the Boring Log. Bridge borings will be advanced to the depths shown or to continuous rock (i.e. greater than 90

percent recovery) using NQ rock coring techniques. Rock core samples will similarly be logged along with measurements of the sample recovery and Rock Quality Designation (RQD). Based on previously performed borings, we anticipate the depth of auger refusal to range from 45 to 50 feet and the depth to competent limestone bedrock to range from 60 to 90 feet. If the depth to continuous rock exceeds these estimates, we will invoice rock coring drilling at the unit rate provided.

Upon completion, subsurface water will be measured and recorded in each borehole, and the borehole will be backfilled with soil auger cuttings. For borings located in the roadway or parking lots, the surface will be patched with cold-patch asphalt prior to demobilization.

Shear Wave Velocity Testing

GTEC will perform seismic shear wave velocity testing at the Pedestrian Bridge 1, Pedestrian Bridge 2, and Pedestrian Bridge 3 sites. The testing will be performed in accordance with ASTM D5777-18 "Standard Guide for Using Refraction Method for Subsurface Investigation". The seismic measurements are interpreted to determine the depths to refracting layers along with the velocity associated with each layer. The average velocity of the upper 100-ft is then calculated in accordance with Section 3.10.3.1 of AASHTO LRFD Bridge Design Specifications to determine the seismic soil class.

Laboratory Testing

A member of our staff will supervise the drilling activities and visually classify the soil samples in general accordance with ASTM D2488, the Standard Practice for Description and Identification (Visual-Manual Procedure). Based on the anticipated conditions, we plan to perform the following laboratory tests on select samples:

- Natural Moisture Content (Soil), AASHTO T265
- Atterberg Limits, AASHTO T89 and T90
- Sieve Analysis with Hydrometer, AASHTO T88
- Consolidation Testing, AASHTO T216
- pH Testing (Soil), AASHTO T289
- Electrical Resistivity (Soil), AASHTO T288
- Chloride Content (Soil), AASHTO T291
- Sulfate Content (Soil), AASHTO T290
- Consolidated Undrained (CU) Triaxial Compression Testing with Pore Pressure Measurements, AASHTO T297
- Rock Core Compressive Strength, ASTM D7012
- Testing to Support Scour Analysis, SRICOS-EFA

Engineering Evaluation and Report

We will issue two reports for the project, one bridge foundation report for all pedestrian bridges and one retaining wall report.

Bridge Foundation Study Report

We will issue a foundation study report describing the exploration and outlining our recommendations. The report will include the following:

- Our understanding of the planned project,
- A summary of existing site conditions, site geology, and topography,
- Records of field tests outlining the materials encountered at the test locations,
- Results of laboratory tests performed to provide information regarding the engineering characteristics of the subsurface materials,
- Boring location plans
- Boring profiles at bridge locations,
- Recommendations for bridge foundations including L-Pile parameters and estimated bearing depths,
- Recommendation for seismic soil site class utilizing shear wave velocity data,
- Results of testing to support scour analysis by others, and
- Groundwater concerns, if encountered.

Retaining Wall Study Report

We will issue a retaining wall study report describing the exploration and outlining our recommendations. The report will include the following:

- Our understanding of the planned project,
- A summary of existing site conditions, site geology, and topography,
- Records of field tests outlining the materials encountered at the test locations,
- Results of laboratory tests performed to provide information regarding the engineering characteristics of the subsurface materials,
- Recommendations for retaining wall foundations, including bearing capacity shown on retaining wall profiles,
- Recommendations for retaining wall design, including values for lateral earth pressures and skin friction,
- Estimated total and differential settlement of retaining walls,
- Recommendation for seismic soil site class utilizing shear wave velocity data,
- Results of testing to support scour analysis by others, and
- Groundwater concerns, if encountered.

<u>Retaining Wall Design</u>

If modular block gravity retaining walls or concrete cantilever retaining walls are used for project walls, GTEC proposes to provide design cross sections and construction details in PDF format. Garver will provide the retaining wall locations, grading, and profiles of each wall with proposed

grades at the top and bottom of each wall. Once design cross sections and profiles are reviewed, drawings will be placed on Garver title block to incorporate into the construction plan set.

FEE AND SCHEDULE

At this time, we propose our services described for the following lump sum fees.

Scope No.	Scope	Fee
1	Pedestrian Bridge 1 (Exploration & Report)	$11,115
2	Pedestrian Bridge 2 (Exploration & Report)	$11,115
3	Pedestrian Bridge 3 (Exploration & Report)	$23,142
4	Retaining Walls (Exploration & Report)	$89,596
5	Retaining Wall (Design & Drawings)	$110,880
6	Shear Wave Velocity Testing	$3,300
7	Testing to Support Scour Analysis (4 total)	$9,574
	Total	**$258,722**

If continuous rock is not encountered by the proposed rock core termination depths, we will invoice the additional rock coring at a unit rate of $70.00 per foot. Services not included in the scope can be added at our prevailing unit rates.

SCHEDULE

We will schedule field activities upon receipt of this contract authorized by signature below and provide the planned dates of services. This proposal is valid if accepted within 60 days of issuance. Following authorization, we plan the following schedule for field activities.

- Week One: Lay Out and Survey Borings and Call in Utilities,
- Week Two: Perform Shear Wave Velocity Testing, Mobilize Path Clearing
- Week Three: Mobilize Drilling and Begin Lab Testing,
- Week Five: Complete Drilling,
- Week Eight: Complete Lab Testing,
- Week Nine: Issue Geotechnical Reports.

Following receipt of retaining wall profiles, we plan the following schedule for design of retaining walls.

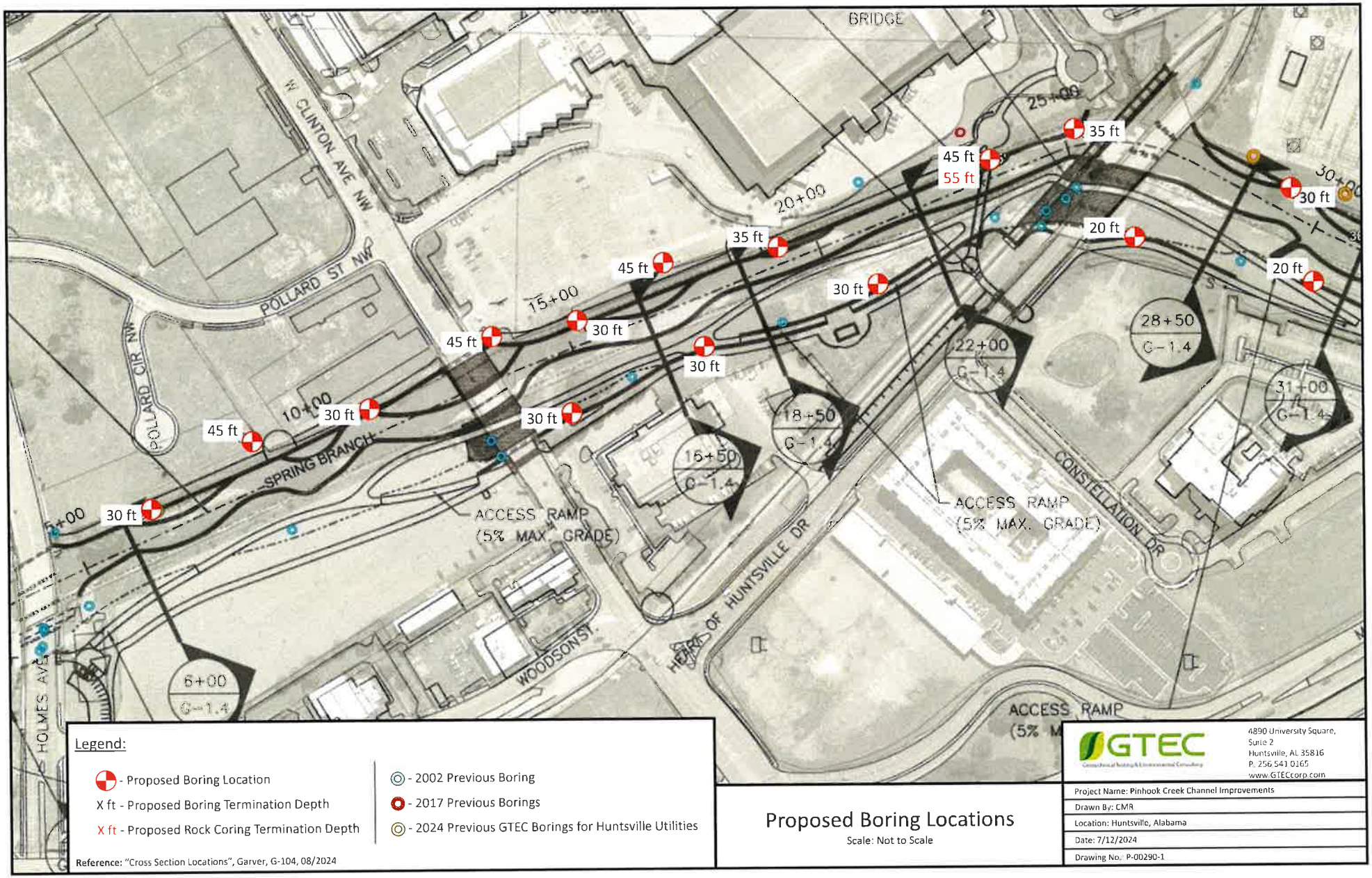
- Week Seven following Receipt of Profiles: Issue Retaining Wall Designs and Drawings.

Pinhook Creek Channel Improvements Sampling and Testing Plan

Boring Type	Location	No. of Borings	No. of Previous AMEC Borings	No. of Previous GTEC Borings	Est. Soil Depth (ft)	Rock Core (ft)	Intact Tube Samples	Natural Moisture Content Tests	Atterberg Limits Test	Particle Size w/ Hydrometer	Particle Size w/o Hydrometer	Unconfined Compression of Rock	CU Triaxial Shear	1-D Consolidation	Corrosion Suite	Scour Aalysis	Asphalt Patch
Bridges	Pedestrian Bridge 1	1	2*	0	45	10	0	12	1	1	0	1	0	0	1	0	0
	Pedestrian Bridge 2	1	2**	0	45	10	0	12	1	1	0	1	0	0	1	0	0
	Pedestrian Bridge 3	1	0	0	35	60	0	10	1	1	0	0	0	0	0	0	0
		1	0	0	45	50	0	12	1	1	0	1	0	0	1	0	0
Retaining Walls	Left of Centerline Eastern Bank 4+50 to 25+50	3	3	0	45	0	2	36	2	1	1	0	1	0	1	0	1
		2	0	0	35	0	2	20	2	0	2	0	0	1	0	1	0
		3	0	0	30	0	3	27	3	1	2	0	1	1	0	0	0
	Left of Centerline Eastern Bank 27+50 to 38+40	1	2	3	45	0	2	12	1	1	0	0	1	0	0	0	0
		2	0	0	35	0	2	20	2	0	2	0	0	1	1	1	0
		2	0	0	30	0	3	18	2	1	1	0	1	1	0	0	0
	Right of Centerline Western Bank 12+50 to 24+20	3	5	0	30	0	3	27	4	1	3	0	1	0	1	1	0
	Right of Centerline Western Bank 25+00 to 29+20	1	1	0	20	0	1	7	2	1	1	0	0	0	1	1	0
	Right of Centerline Western Bank 30+10 to 32+10	1	2	0	20	0	2	7	1	1	0	0	1	0	1	0	0
	Wall Total:	**18**	**13**	**3**	**600**	**0**	**20**	**174**	**19**	**7**	**12**	**0**	**6**	**4**	**5**	**4**	**1**
Total:		**22**	**13**	**3**	**770**	**130**	**20**	**220**	**23**	**11**	**12**	**3**	**6**	**4**	**8**	**4**	**1**

* Borings offset 60 feet and 70 feet from abutments

** Borings offset 20 feet and 70 feet from abutments



Legend:

- Proposed Boring Location
- X ft - Proposed Boring Termination Depth
- X ft - Proposed Rock Coring Termination Depth
- 2002 Previous Boring
- 2017 Previous Borings
- 2024 Previous GTEC Borings for Huntsville Utilities

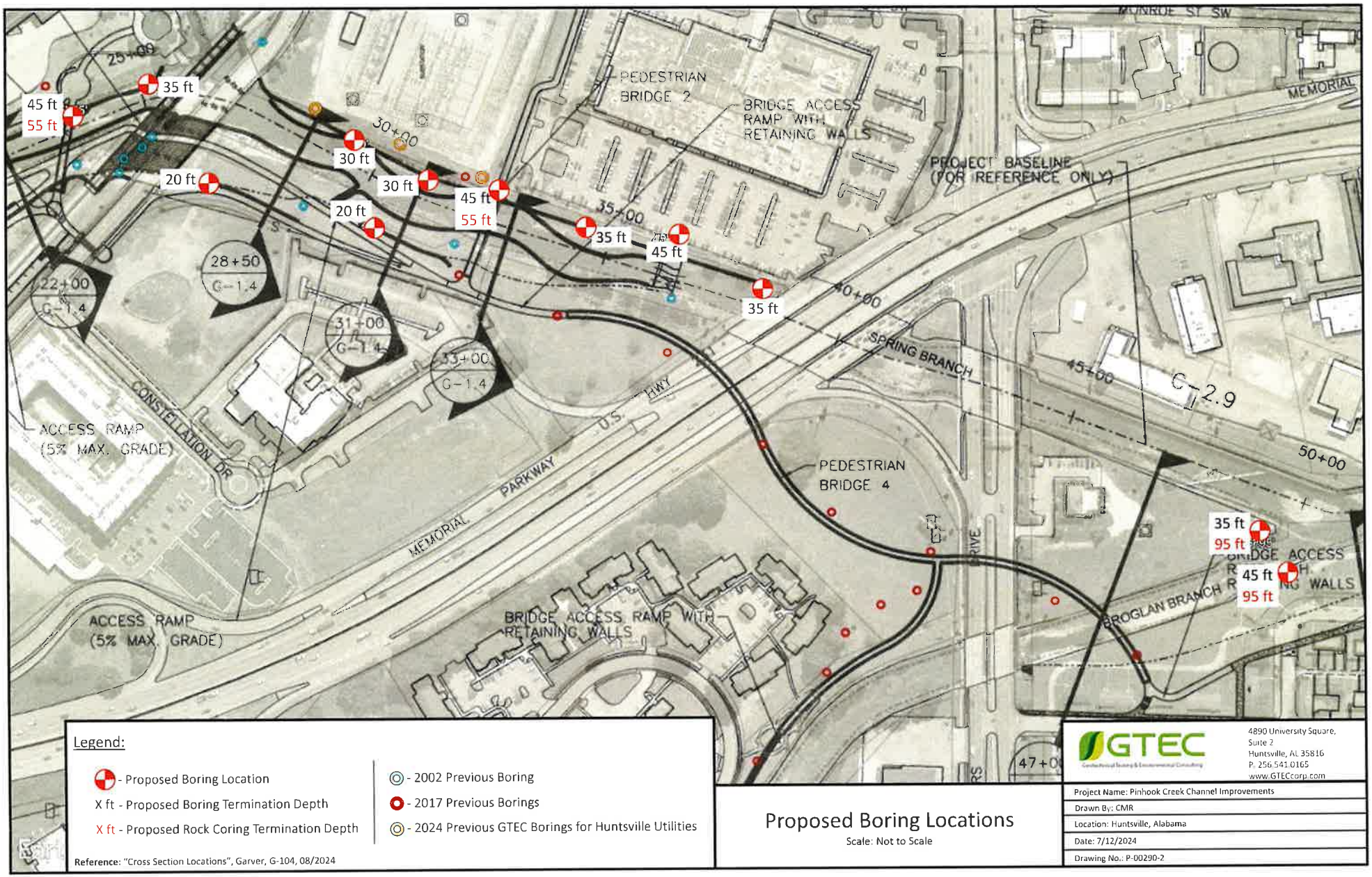
Reference: "Cross Section Locations", Garver, G-104, 08/2024

Proposed Boring Locations

Scale: Not to Scale

GTEC
4890 University Square,
Suite 2
Huntsville, AL 35816
P. 256 541 0165
www.GTECcorp.com

Project Name:	Pinhook Creek Channel Improvements
Drawn By:	CMR
Location:	Huntsville, Alabama
Date:	7/12/2024
Drawing No.:	P-00290-1



Legend:

- Proposed Boring Location
- X ft - Proposed Boring Termination Depth
- X ft - Proposed Rock Coring Termination Depth
- 2002 Previous Boring
- 2017 Previous Borings
- 2024 Previous GTEC Borings for Huntsville Utilities

Reference: "Cross Section Locations", Garver, G-104, 08/2024

Proposed Boring Locations

Scale: Not to Scale

GTEC
Geotechnical Testing & Environmental Consulting
4890 University Square,
Suite 2
Huntsville, AL 35816
P. 256.541.0165
www.GTECcorp.com

Project Name:	Pinhook Creek Channel Improvements
Drawn By:	CMR
Location:	Huntsville, Alabama
Date:	7/12/2024
Drawing No.:	P-00290-2

Land Design Solutions, Inc.
6996 LINDA STREET
HUNTSVILLE, AL 35811

Email: mikeadonnelly@att.net
Voice: 256.714.1470

June 1, 2024
Mr. Andrew E. Dinges, PE, PLS
Garver
5125 Research Drive, NW
Huntsville, AL 35805

RE: Proposal for Landscape Architectural Services for the PARC – Pedestrian Access and Redevelopment Corridor, Holmes Avenue to Memorial Parkway

Dear Andy,

Following is our proposal for providing professional Landscape Architectural services for the above referenced area. As directed by Kathy Martin, I am excluding from this proposal, any work on east side of Pinhook Creek, from Holmes Avenue to Rotary Fountain, including embankment and promenade; I am including the on grade area around the Suspension Bridge ramp abutment between Binford Drive and Broglan Branch.

It is my understanding from meeting at your office on May 7th with you and Scott, and subsequent email to group from Kathy Martin, the City of Huntsville (COH) intends to construct proposed improvements of the project area in four bid packages, to be released in a specified date sequence.

We have reviewed prior PARC project design concept work by UDA, published as "Urban Design Recommendations" dated December 2016, the Design Concept Plan by Ron Huffman ASLA for AMEC dated 12/2016 and 60% (?) construction plans by AMEC / Wood. In addition, we have reviewed the following written PARC project documents: EA by the Corps of Engineers and the TIGER grant application by the COH.

In our review of the above documents, we found no Design Development (DD) or Construction Document (CD) plans for development of pedestrian Gateway Entries, Hardscapes, Pavilion, Shade Structures, Fine Grading, Pedestrian Signage, Lighting, Irrigation or Landscaping. We propose to include the DD & CD components for these items within our proposal below. The DD process will inevitably produce plans that affect the previously completed 60% (?) Construction Plans. Our proposal includes updates to these areas of the previously developed PARC base plan. The DD & CD components of our proposed Landscape Architectural services are described in detail below.

1 | PARC – Pedestrian Access and Redevelopment Corridor Proposal

Note: Public Art is encouraged to be included within the PARC. The previously reviewed PARC documents did not provide information on PARC Public Art elements. At this time, the Landscape Architect excludes Public Art services from this proposal.

SCOPE OF LANDSCAPE ARCHITECTURAL SERVICES

Schematic Design
Schematic Design services that will be addressed, discussed and programed with owner and design team include: Pedestrian entry points into the linear PARC, both Gateway Entries and Minor Entry points. Low flow channel edge alternatives and integration with stream restoration and stream structures, including habitat enhancements. Additionally, integration of landscape character with stream restoration, stabilization and riparian buffers, Site lighting objectives and coordination with cable suspension & pedestrian bridge lighting will be discussed. Shade Structures and Heart of Huntsville Pavilion character studies will also be developed. COH has previously established pedestrian signage standards for the downtown core. We propose to expand on these standards with PARC wayfinding and entry signage locations and content. We are including coordination and collaboration with COH's existing sign manufacturing, installation & maintenance company for this sign work.

Design Development
Design Development services will further the Schematic Phase into more detailed, specific choices with chosen character of development. Site improvement plans, site details, fine grading studies, landscape material type and location, proposed material selections and finishes are in this phase of development. Light fixture types & locations are proposed at this time with point by point analysis. Channel edge plans are anticipated to be further developed at this time through coordination with design team.

Construction Documents
Construction Document Phase will further the Design Development Phase documents into the technically complete & final plans, details and specifications for bidding. Note: Garver is developing Rough Grading Plans that will be further detailed and supplemented by the Landscape Architects finer detail plans.

CONSTRUCTION PLAN PACKAGES

Three Plan Packages with associated plans, details and Specifications will be developed by Land Design Solutions and sub-consultants as follows:

Channel Improvements Plan Package
This provides for coordination, Schematic Design, Design Development and Construction Documents for Landscape Architect's part of the project. Landscape Architect's team will coordinate with the COH, and Garver. The elements of this Plan Package are anticipated to be mass fine site grading with vegetation stabilization, natural stream channel restoration, channel stabilization and channel riparian buffers. Landscape Architect's Construction Documents are anticipated to be Layout & Keynote Plans, Fine Grading Plans, Channel Edge Plans and Details,

Channel Edge & Surroundings Landscape Plans and Details and Channel Surroundings Irrigation Plans & Details. Should poured in place retaining walls be used in project, we anticipate Lighting Fixture Location Plans for rough in of wall light housings that are adjacent to future sidewalks on west side of channel

Cable Suspension Bridge Plan Package
This provides for coordination, Schematic Design, Design Development and Construction Documents for Landscape Architect's limited part of the project. Per Kathy Martin's request, I am including the on grade area around the Suspension Bridge ramp abutment between Binford Drive and Broglan Branch, including from end of ramp to Seminole Drive. Note, the North Abutment Area is covered in Rosales plans, and final location of South Abutment is undetermined at this time and excluded from this proposal. Landscape Architect's work will be coordinated with the COH, Garver, and Rosales. Landscape Architect's Construction Documents are anticipated to be Layout & Keynote Plans, Fine Grading Plans, Hardscape / Walkway Plans and Details, Landscape Plans and Details, Irrigation Plans & Details, and Lighting Fixture Location Plans.

RR Bridge Plan Package
Excluded from this proposal, is any work within the RR Bridge Plan Package by the Landscape Architect.

Pedestrian Bridges and Hardscape Plan Package
This provides for coordination, Schematic Design, Design Development and Construction Documents for Landscape Architect's team part of the project. Landscape Architect's work will be coordinated with the COH, and Garver. The elements of this Plan Package are anticipated to be Site fine grading, Heart of Huntsville Pavilion Structure, Shade Structures, Hardscape / Walkways, Lighting Fixture Types & Locations, Pedestrian Signage, Benches and Trash receptacle locations, Pedestrian Signage Location, Landscaping and Irrigation. Landscape Architect's Construction Documents are anticipated to be Site Layout & Keynote Plans, Site Hardscape & Walkways Plans, Site Fine Grading Plans, Site Landscape Plans and Details, Site Irrigation Plans and Details and Site Lighting Fixture Types & Location Plans.

SUB-CONSULTANTS
Land Design Solutions will utilize the services of Matheny Goldmon for Architectural services on the Heart of Huntsville Pavilion. Lynne Weningar, Botanist will be assisting on stream restoration design team in reviewing local streams for reference reach, native plant selection assistance and design assistance in stream bank, floodplain bench, terraces and created wetlands native plant restoration design. Lighting fixture point by point analysis will be provided by Holophane Lighting.

ASSUMPTIONS

This proposal assumes Garver supplies ACAD dwg files, ready to use, that includes standard topographic survey elements. Additionally, we assume all previous, revised and new design elements are included in the dwg files.

EXCLUSIONS

This proposal specifically excludes site observation services, flood studies, flood certifications, flood plain permits, building permits, retaining walls structural design, walkway/maintenance truck driveways structural design, traffic studies, lighting fixture circuiting design, signage design studies, erosion control design, fire department plan review / permit, and ADEM permits or inspections.

FEES

Land Design Solutions and sub-consultants shall develop Schematic, Design Development and Construction Plans for the above defined Channel Improvements Plan Package, Cable Suspension Bridge Plan Package and Pedestrian Bridges and Hardscape Plan Package for Garver / Owner's use, and in obtaining bids. Fees for the above work are as stated below. LDS shall invoice Garver on monthly basis for percentage of Fees / Work performed the previous month.

Per our review of AMEC / WOOD plans & the estimated preliminary construction cost values as provided in the 2017 Tiger Grant application, we added our estimate of the work in today's dollars. We estimate the preliminary construction costs of LDS scope of work as $5,025,000.00.

As previously stated in this proposal, LDS conducted an extensive review of prior PARC work by others, and found little documentation / plans to be used in our Scope of Work. However, in consideration of the COH's effort to complete this project, and in furtherance of our relationship with the COH, LDS & Sub-consultants have discounted fees as noted below.

Land Design Solutions and sub-consultants shall perform the above work for:

LDS fee	$275,956.80
LDS fee discount to City of Huntsville	-$25,752.84
Sub-consultants fee	$68,000.00
Sub-consultants fee discount	-$2,900.00
5% Administration fee	$3,255.00
Plan Reproduction	$4,531.00
Total lump sum fee	$323,089.96

Cordially,

Mike Donnelly, PLA

Attachments

PROPOSAL FOR ARCHITECTURAL SERVICES

This Binding Agreement made as of May 29, 2024, between the Architect's client identified as the Client:

the Client:	**Land Design Solutions, Inc.** 6996 Linda Street Huntsville, Alabama 35811
and the Architect:	Matheny Goldmon Architecture + Interiors, LLC (MGA+I) 108 Woodson Street NW Huntsville, Alabama 35801
for the following Project:	A New Pavillion and Restrooms for the Huntsville PARC Greenway Huntsville, Alabama 35801
The Client's Representative(s) shall be:	Mike Donnelly
The Owner's Representative(s) shall be:	Engineering Department Representative TBD
The Architect's Representative(s) shall be:	H. Paul Matheny, AIA, Principal Architect *and* Turner Mclemore, Project Manager

NOTE: Land Design Solutions holds the prime agreement with Garver/Owner.

Project Description: This Project will include designing a new pavilion structure consisting of public-use restrooms, premium outdoor covered amenity space, and storage. The structure will be approximately 800 square feet of conditioned area and 2,400 square feet of covered patio.

Scope of Services: Matheny Goldmon Architecture + Interiors, LLC, along with its Consultants, shall provide Schematic Design and Design Development Services, and Construction documents for Architectural Design, Structural Engineering, Mechanical, Electrical, Plumbing, and Fire Protection (if required) Engineering Services, along with Basic Interior Design Services for the Restroom Facilities, that will be delivered to the Owner in the form of Construction Documents (drawings and/or specifications) as necessary for the construction of the Project.

Should the Client require a change in the Scope of Services to include Bidding and Negotiating and/or Construction Administration Services, or there is an adjustment in the Construction Budget, the Fee outlined below may transition to a Percentage of construction cost or a negotiated Fixed Fee, depending upon the actual Scope and Budget.

Project Fee: MGA+I agrees to provide the above services for a Fixed Fee of Fifty-Four Thousand Dollars and Zero Cents ($54,000.00). This is based on an initial Construction Budget of Five Hundred and Forty Thousand Dollars and Zero Cents ($540,000.00).

This Billing shall occur monthly based on progress as a percentage of the total Project Fee:

Schematic Design:	30%
Design Development	30%
Construction Documents:	40%
Total Compensation:	100%

The Client or their Representative(s) reserves the right to halt services associated with the above-referenced Project at their discretion. However, the Owner will be responsible for payment of services billed or unbilled that have been completed to that date. MGA+I reserves the right to halt services associated with the above-referenced Project for any unpaid invoices beyond 30 (thirty) days. Such delay shall also adjust delivery dates and schedules.

Services Not Included: The Client should note that the following services are NOT included in the Architect's proposed services:

- Civil Engineering
- Interior and Exterior 3-D Renderings and Models or Animations
- Geotechnical Services
- Landscape Architecture
- Furnishings, Fixtures & Equipment (FF&E) Services and Coordination
- Value Engineering Revisions to the Scope of Services

Compensation for Additional Services (Hourly Rates) and Reimbursable Expenses: For services extending beyond the scope described in this document and for reimbursement of project-related expenses, compensation shall be set forth in the manner addressed in Attachment A: Hourly Rates and Reimbursable Expenses.

Authorization to Proceed: Please sign this Binding Agreement as acceptance of the terms herein and return it to us for approval to proceed. This Agreement, although binding, may ultimately be replaced with an AIA Contract (or a mutually acceptable contract), which can more thoroughly define the terms of the agreement between the Client and Architect. If required, the AIA Contract will be prepared on the terms agreed to in this document and will be presented to the Client for execution.

The Owner herein, individually and as its Authorized Representative, guarantees full performance under this Agreement, including, but not limited to, the payment of cost, attorney's fees for enforcement, or collection under this Agreement.

Accepted and Approved by:

Client:

Mike Donnelly Land Design Solutions, Inc.

President

Dated

Architect:

H. Paul Matheny, AIA

Principal

May 29, 2024
Dated

Attachments:
Attachment A: Hourly Rates and Reimbursable Expenses
Attachment C: Basic Interior Design Services

Lynne Weninegar
Botanist
9507 Hemlock Drive SE
Huntsville, AL 35803

May 29, 2024
Land Design Solutions, Inc.
Mr. Mike Donnelly PLA
6996 Linda Street
Huntsville, AL 35811

RE: PARC Project
Huntsville, AL

Dear Mike,
Thank you for the opportunity to participate in such a needed project for the Stream Restoration of Pinhook Creek. Having practiced in botany for over 30 years in the North Alabama area, I am confident I can provide the knowledge and input necessary for the native plant palate selection and proper locations for their use, in the channel restoration element of the PARC project. I am very familiar with the North and Central Alabama flora indigenous in wetland ecosystems, as my graduate work concentrated in this specialty, and my current practice and volunteer work with North Alabama Land Trust often involves work in local stream watersheds. Following is my proposal for providing professional botanist services for the PARC project.

PROPOSAL

TASK 1: REVIEW OF NATURAL LOCAL STREAMS
I will assist the Stream Restoration design team by familiarizing them with local streams with varying natural bank stability. This may establish a reference reach for design work.

TASK 2: EXISTING NATIVE PLANT INVENTORY
I will assist the Stream Restoration design team in performing a native plant inventory of work area reach, along with a limited upstream and downstream plant inventory. Additionally, reference reach shall have a plant inventory performed to be used in plant palette selection for design reach.

TASK 3: ASSIST IN VEGETATION STABILIZATION DESIGN
I will assist the Stream Restoration design team in recommending reeds, rushes, herbaceous and woody native plants, plant associations, and seed mixes, for successful stabilization of stream embankments, floodplain bench, terraces and created wetlands. Should salvage of existing native vegetation be included in project, as an additional service, I will assist in identifying suitable local species at owner's source location for removal and relocation by others.

TASK 4: SITE OBSERVATION
As an additional service, I will assist in site observation of native plantings and seed installation to verify compliance with design plans and specifications. Site observation reports of observations during each visit, will be provided to owner and design team.

ASSUMPTIONS: Design Team supplies printed project documents of plans, specifications and reports for my use in performing project work.

EXCLUSIONS: This proposal specifically excludes plant selection / tagging at nursery, permits, fees, applications, or soil testing.

FEES: The fee for TASKS 1, 2 &3 shall be a lump sum of $14.000.00. The fee for TASK 4 shall be performed on an hourly basis as requested by owner, design team. My hourly rate for Site Observation Task is $62.50/Hour.

Best Regards,

Lynne Weninegar

Lynne Weninegar
Consulting Botanist

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): GARVER, LLC
- City of Huntsville current taxpayer identification number (if available): 4755
  (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
☐ Individual or Sole Proprietorship	Not Applicable
☐ General Partnership	Not Applicable
☐ Limited Partnership (LP)	Number & State:
☐ Limited Liability Partnership (LLP)	Number & State:
☐ Limited Liability Company (LLC) (Single Member)	Number & State:
☒ LLC (Multi-Member)	Number & State: 136653 - AL 01-0733400 - EIN
☐ Corporation	Number & State:
☐ Other, please explain:	Number & State (if a filing entity under state law):

7103095 83 AL TAX ID

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/, 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): Regional Office Administrator

Type or legibly write name: JERRY D. McCARLEY Date: 1/6/12

Revised 12/7/2011

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 we 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)
- 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.
- Tree Ordinance

REQUIRED SUBMITTALS TO THE PROJECT ENGINEER

1. A Certificate of Insurance for the ENGINEER and the ENGINEER's sub-consultants 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.
4. One (1) complete set of all approved permits including Location, Character, and Extent.

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 Officer (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.

ATTACHMENT 5 - ENGINEERS PERSONNEL FEE SCHEDULE

GARVER

2024 Hourly Rate Schedule

Classification	Rates
Engineers / Architects	
E-1	$ 120.00
E-2	$ 150.00
E-3	$ 170.00
E-4	$ 200.00
E-5	$ 235.00
E-6	$ 280.00
E-7	$ 317.00
Planners	
P-1	$ 110.00
P-2	$ 140.00
P-3	$ 160.00
P-4	$ 180.00
P-5	$ 205.00
Designers	
D-1	$ 115.00
D-2	$ 142.00
D-3	$ 155.00
Technicians	
T-1	$ 100.00
T-2	$ 120.00
T-3	$ 135.00
Surveyors	
S-1	$ 58.00
S-2	$ 71.00
S-3	$ 90.00
S-4	$ 135.00
S-5	$ 195.00
S-6	$ 210.00
2-Man Crew (Survey)	$ 225.00
3-Man Crew (Survey)	$ 285.00
2-Man Crew (GPS Survey)	$ 235.00
3-Man Crew (GPS Survey)	$ 285.00
Construction Observation	
C-1	$ 115.00
C-2	$ 145.00
C-3	$ 195.00
C-4	$ 250.00
Environmental Specialists	
ES-1	$ 102.00
ES-2	$ 151.00
ES-3	$ 168.00
ES-4	$ 198.00
ES-5	$ 255.00
Management / Administration	
AM-1	$ 70.00
AM-2	$ 90.00
AM-3	$ 130.00

The above rates will not change for the duration of this contract.

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:	August 9, 2025	_____

(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)

CONSULTANT NAME AND ADDRESS	DESCRIPTION OF SERVICES	FEE
GTEC, L.L.C. 4890 University Square Suite 2 Huntsville, AL 35816	Geotechnical Engineering Study	$258,722.00
Land Design Solutions 6996 Linda Street Huntsville, AL 35811	Landscape Architectural Services for the PARC	$323,089.96
	SUB-TOTAL	$581,811.96
	5% Administrative Fee	$29,090.60
	TOTAL	$610,902.56

ATTACHMENT 8 - CONTRACT DOCUMENT REQUIREMENTS LIST

REQUIREMENT	SUBMIT TO	SUBMITTAL REQUIREMENT DATE	NUMBER OF COPIES	REFERENCE SECTION OF CONTRACT AND COMMENTS
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
ADA grades, elevations and layout	OWNER	90% review, 100% complete	2	Article 2.6
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

DRAWINGS

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.

All drawings shall be prepared in MicroStation. DGN format, unless otherwise approved by the City Engineer. Transmittal letters should 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.

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.

OTHER DOCUMENTS

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.

Digital files shall be submitted by 4-3/4" CD ROM, DVD, 3 and 1/2 inch floppy disk, flash drive, 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.

All PDF files shall be searchable.

Schedules 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."

All final drawings, specifications, plans, calculations, letters containing Engineering or Surveying recommendations or other Engineering or Land Surveying papers or documents involving the practice of engineering or land surveying as defined by Code of Alabama, Title 34, Chapter 11 shall be sealed, dated, and bear the signature of the person who prepared or approved them.

Working drawings or other documents shall contain a statement to the effect "Preliminary-Not for construction, recording purposes or implementation."

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:_____

CONSTRUCTION PLANS FOR

PROJECT NAME

PROJECT INFORMATION

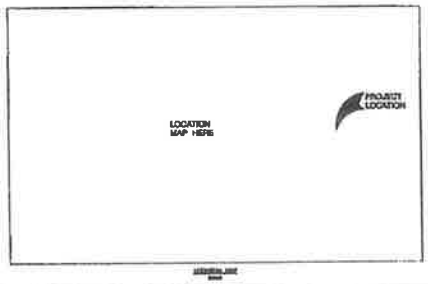
FOR THE

CITY OF HUNTSVILLE

HUNTSVILLE, ALABAMA

(PROJECT NO. XXXXXXXXX)

SAMPLE STANDARD DRAWING FORMAT



HUNTSVILLE
The Star of Alabama

INDEX OF DRAWINGS

SHEET NO.	TITLE

INDEX TO DRAWINGS SHALL BE PLACED ON COVER SHEET IF POSSIBLE, OTHERWISE IT SHALL BE THE SECOND SHEET IN THE SET.

SPACE RESERVED FOR "AS" DATA LOGO, FILE NUMBER, ETC.

AREA RESERVED FOR "PSE" SEAL

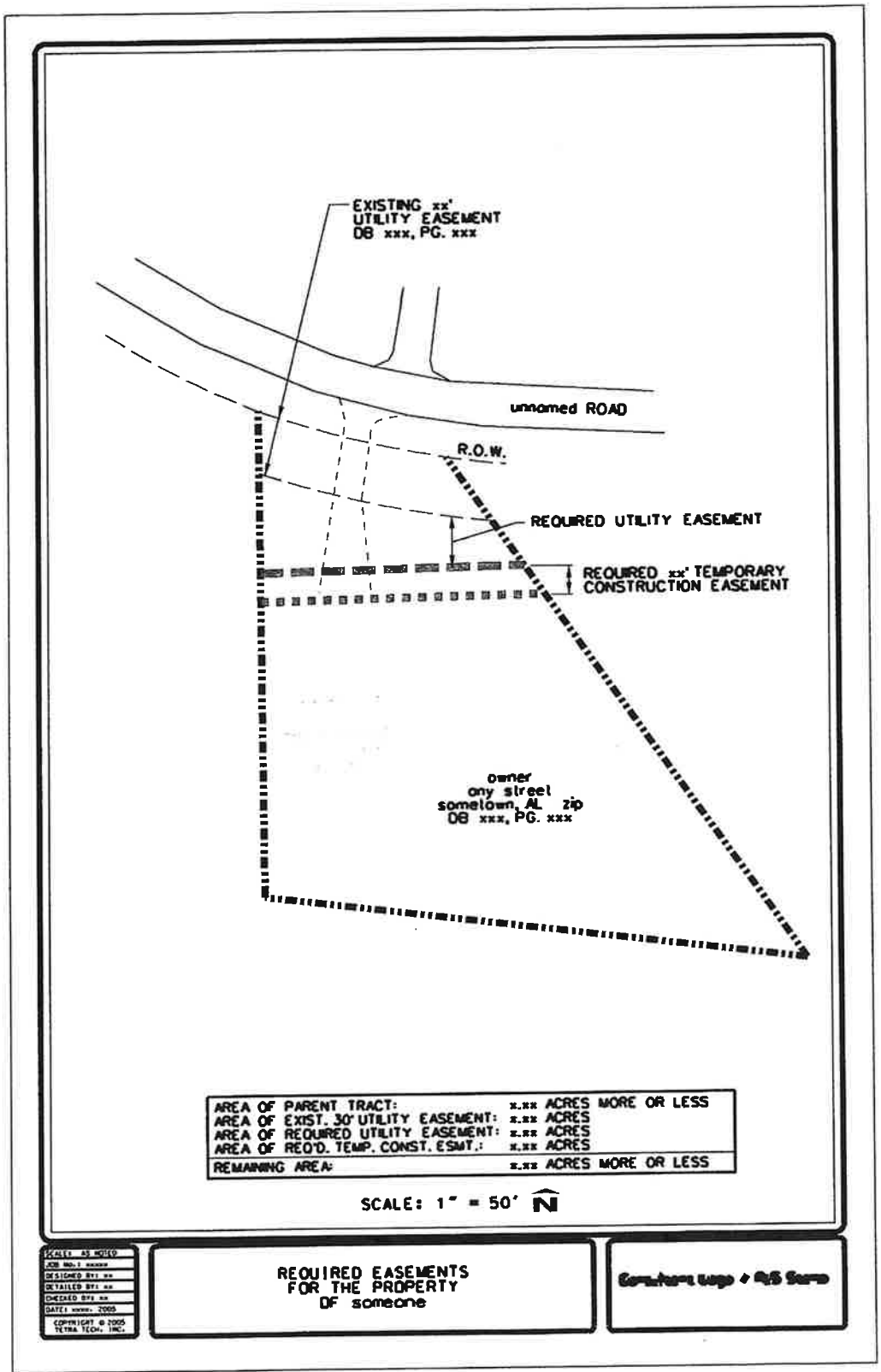
TITLE SHEET

PROJECT NAME AND INFORMATION
CITY OF HUNTSVILLE
HUNTSVILLE ALABAMA

OF
SHEETS

ATTACHMENT 11

ATTACHMENT 12
SAMPLE



...\easementtemplate_V7.dgn 3/17/2006 12:11:14 PM

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)*

Description	Color	Line Style	Type
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						

ATTACHMENT 16 – REQUIRED DELIVERABLES

Checklist must be submitted at 100% review and with final invoice.

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

YES	NO		REQUIRED SUBMITTALS TO THE PROJECT ENGINEER
☐	☐	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 Code of Alabama (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.
☐	☐	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".
☐	☐	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
☐	☐	4.	One (1) Micro station digital file of right-of-way drawings.
☐	☐	5.	Two (2) print sets of 8-1/2" x 11" legal descriptions for right-of-way (REVISED SETS ONLY)
☐	☐	6.	One (1) digital text file of legal descriptions for right-of-way (REVISED FILE ONLY)
☐	☐	7.	One (1) print copy of Final Construction Cost Estimate.
☐	☐	8.	One (1) digital spread sheet file of Final Construction Cost Estimate.
☐	☐	9.	Three (3) printed and bound copies of corrected quantity calculations to match Final Bid Quantities.
☐	☐	10.	One (1) digital spread sheet file (Excel 2003 format) of Final Bid Quantities.
☐	☐	11.	Two (2) print sets of contract specifications.
☐	☐	12.	One (1) digital text file of contract specifications.
☐	☐	13.	One (1) complete set of signed and sealed calculations.
☐	☐	14.	One (1) complete set of permits for COH signature and Engineer's submittal to include but not limited to USACE, ADEM NPDES NOI, ETC. This package will also include CBMPP, ALDOT Maintenance, ROW and utility permit Applications for ALDOT Funded Projects as required.
☐	☐	15.	One (1) complete set of all field notes.
☐	☐	16.	One (1) copy of digital aerial photography obtained for this PROJECT in (.tif) format, as necessary.
☐	☐	17.	Utility Project Notification forms and a list of all utilities that need to be contacted.

_____ Engineer