

APPROVED AS TO FORM
(GDW)
Office of the City Attorney

Prepared By: GDW/rd
Requested: Projects Comte Date: 10/18/19
Council Presentation: 10/22/2019
Suspension of Rules: No

RESOLUTION

**RESOLUTION AUTHORIZING A CONTRACT FOR ENGINEERING
AND RELATED SERVICES WITH THE CASSADY COMPANY, INC. FOR
THE JUANITA DRIVE PHASE 2 IMPROVEMENTS PROJECT
(A19-1151/OCE Project No. 2019.012.001)**

**BE IT RESOLVED BY THE CITY COUNCIL OF TUSCALOOSA AS
FOLLOWS:**

That the Mayor be, and he is hereby, authorized to execute a contract for engineering and related services with The Cassady Company, Inc. for the Juanita Drive Phase 2 Improvements Project in an amount not to exceed \$ 811,056.70, by, and as an act for, and on behalf of the City of Tuscaloosa, and the City Clerk is authorized to attest the same.

FUNDING REQUIRED: Yes No / CR

CDBG-DR1
CDBG-DR2

By: Luisa n.c. f. Snider
Chief Financial Officer

COUNCIL ACTION

Resolution ✓
Ordinance _____
Introduced _____
Passed 10-22-19
2nd Reading _____
Unanimous _____
Failed _____
Tabled _____
Amended _____
Comments: _____

CITY OF TUSCALOOSA, ALABAMA

**CONTRACT TO FURNISH ENGINEERING AND RELATED
SERVICES TO THE CITY OF TUSCALOOSA FOR
DESIGN AND CONSTRUCTION OF A
PUBLIC WORKS PROJECT**

WALTER MADDOX, MAYOR

CITY COUNCIL OF TUSCALOOSA

Council Members:

**Phyllis Odom
Raevan Howard
Cynthia Lee Almond
Matthew Calderone
Kip Tyner
Edwin Pugh
Sonya McKinstry**

Glenda Webb, City Attorney

**PROJECT: Juanita Drive Improvements – Phase 2
The Cassidy Company, Inc.**

PROJECT NUMBER: A19-1151 / OCE Project No. 2019.012.001

(2018)

TABLE OF CONTENTS

ARTICLE 1.	THE PROJECT	1
ARTICLE 2.	DEFINITIONS	2-3
ARTICLE 3.	SCOPE OF SERVICES	3-4
A.	Preliminary Design Services	4-6
B.	Final Design Services	6-8
C.	Bid Phase Services	8-9
D.	Engineering Services During Construction	9
1.	Engineer, Owner's Representative	9
2.	Generally	9-10
3.	Preconstruction Conference	10
4.	Observations of Project by Engineer, etc.	10
5.	Authority of Engineer	10
6.	Bid Law; Change Orders	10-11
7.	Certificates of Payment	11-12
8.	Compliance with Laws, etc.	12
9.	Access	12
10.	Submittals, etc.	12
11.	Traffic Control Plan	12
12.	Substantial Completion/Final Completion & Payment	12-14
E.	General Responsibilities	14
ARTICLE 4.	DESIGN TESTS AND OTHER STUDIES	14
ARTICLE 5.	ADVANCED SERVICES DURING CONSTRUCTION; SDC	14
A.	Additional Engineering Construction Services	14
B.	Project Inspectors	15
1.	Generally	15
2.	Construction Video and Photographs	15
C.	Contractor's Responsibility	15
ARTICLE 6.	PERMITTING, LICENSES AND/OR STUDIES	15-17
ARTICLE 7.	LEVEL OF COMPETENCE, OWNER APPROVAL, CONFLICTS OF INTEREST, ETC.	17-18
ARTICLE 8.	RECORD DOCUMENTS	18
ARTICLE 9.	OWNERSHIP AND USE OF DOCUMENTS	18-19
ARTICLE 10.	ASSIGNMENT	19-20
ARTICLE 11.	INSURANCE	20

ARTICLE 12.	STATUS OF ENGINEER	20
ARTICLE 13.	PERSONNEL	21
ARTICLE 14.	COMPENSATION	21
	A. Preliminary Design	21
	B. Final Design	21
	C. Bid Phase	22
	D. Basic Engineering SDC	22
	E. Design Surveying	22
	F. Maximum Payments	22
	G. Easements/Rights-of-Way	22
	H. Advanced Services During Construction (SDC); Administration and Inspections	22
	I. Design Testing	23
	J. Construction Testing	23
	K. Administration; Reimbursement of Expenses	23
	L. Permitting, Licensing and/or Studies	23
	M. Prequalification of Bidders	23
	N. Traffic Control Plan	23
	O. L.O.M.R.	23
	P. Sales and Use Tax Savings	23
	Q. Generally	23-24
ARTICLE 15.	PERIOD OF SERVICE	24
	A. Completed Preliminary Design	24
	B. Easement Negotiation, etc.	24
	C. Final Design	24-25
	D. Bidding Phase	25
	E. Construction Administration and Services During Construction	25
	F. Miscellaneous	25
	G. Suspension, Delay, or Interruption of Work	25-26
ARTICLE 16.	FINAL PAYMENT	26
ARTICLE 17.	TERMINATION	26-27
ARTICLE 18.	ATTACHMENTS, MISCELLANEOUS CLAUSES SCHEDULES AND SIGNATURES	27
ARTICLE 19.	MISCELLANEOUS CLAUSES	27-30
ARTICLE 20.	COMPLIANCE WITH IMMIGRATION LAW	30
ARTICLE 21.	COMPLIANCE WITH AFFORDABLE HEALTH CARE ACT	31
ARTICLE 22.	COMPLIANCE WITH ACT 2016-312	31

STATE OF ALABAMA)
TUSCALOOSA COUNTY)
CITY OF TUSCALOOSA)

**CONTRACT TO FURNISH ENGINEERING AND RELATED SERVICES
TO THE CITY OF TUSCALOOSA FOR DESIGN AND
CONSTRUCTION OF A PUBLIC WORKS PROJECT**

(Project Name: Juanita Drive Improvements—Phase 2)
(Project Number: A19-1151 / OCE Project No. 2019.012.001)

THIS AGREEMENT made and entered into on this the 25th day of October, 2019, by and between the firm of THE CASSADY COMPANY, INC., a Professional Engineering Corporation, hereinafter referred to as the ENGINEER, which will provide engineering and related services described herein to the CITY OF TUSCALOOSA, a Municipal Corporation, hereinafter sometimes referred to as the OWNER or CITY, for the consideration hereinafter set forth, for a project generally described as a Public Works Project, as further specified herein, as follows:

W-I-T-N-E-S-S-E-T-H:

ARTICLE 1 - THE PROJECT

The "Project" (hereinafter referred to as the Project or Projects as the case may be) includes the following public works construction and/or improvements and related facilities and appurtenances:

GENERALLY:

Juanita Drive Improvements Project-Phase 2 is located along the looped portion of Juanita Drive, north of 6th Street East and north of the initial Phase 1 project. Improvements include roadway widening, sidewalks, storm sewers, water system improvements and sanitary sewer improvements. This Phase 2 Project will be designed similar to and transition from the initial Phase 1 project. Phase 2 improvements will require City road right-of-way and utility easements.

Without limiting the generality of the foregoing, specifically the scope of services to be performed by ENGINEER are as more particularly set forth in the attached document entitled "Juanita Drive Improvements – Phase 2 Project", which is attached hereto and adopted herein by reference as Exhibit "A". Any changes in the scope of services as set forth herein or in Exhibit "A" shall only be by amendment, in writing, duly authorized and executed by the parties.

ARTICLE 2 – DEFINITIONS

Unless the context clearly indicates otherwise, the following terms shall have the meaning ascribed to them:

A. **Contract Documents.** Contract documents are defined as including, but not limited to plans, drawings, specifications, contracts, bond requirements, bonds, insurance requirements, legal requirements, general conditions, special conditions, advertisement, addenda, instructions to bidders, change orders, change order requests, and any written modifications to any such documents.

B. **Contractor.** The Contractor shall generally be defined as the construction entity with whom the OWNER contracts to construct the work (Project). The Contractor is responsible to the OWNER for his subcontractors, suppliers, etc. The OWNER and ENGINEER shall recognize and conduct business with the prime contractor. However, the ENGINEER shall treat all work by subcontractors or suppliers the same as if the work had been performed or furnished solely by the prime contractor. The prime contractor has full responsibility and is solely responsible for the actions or inactions and work of his subcontractors. In the event the OWNER is utilizing a construction management format, CONTRACTOR shall refer to each trade contractor.

C. **Direct Expenses.** That, the ENGINEER'S direct expenses are defined as the costs incurred on or directly for the project (other than the salary and general overhead costs as defined herein before). Such direct expenses shall be computed on the basis of actual purchase price for items obtained from commercial sources and on the basis of usual commercial charges for items provided by the ENGINEER. Direct expenses shall include, but not be limited to, necessary transportation costs, including mileage when the ENGINEER'S own automobiles are used, meals and lodging, field and laboratory tests and analyses, automatic typing equipment services, telephone, printing, binding and mailing charges, relocation and travel expenses of employees to the project(s) area as necessary, and all costs associated with subconsultants, and other outside services and facilities.

D. **Engineer.** The ENGINEER shall generally be defined as the party with whom the OWNER contracts to provide engineering and related services pursuant to this AGREEMENT. The term "ENGINEER" shall generally include its officers, employees, agents, consultants, and contractors to the ENGINEER.

E. **Gender.** A word importing one gender shall, if appropriate, extend to and be applied to the other gender. The masculine shall include the feminine and vice-versa, unless the context clearly indicates otherwise.

F. **Hourly Rate or Hourly Per Diem Rate.** The hourly rate per classification of employee of ENGINEER reflected at the rate per hour or one-eighth (1/8) of the tabulated per diem rate for a normal eight (8) hour workday. The hourly rate and/or the per diem hourly rate include all overhead as herein defined. Hourly Rates are defined as those rates charged for work directly performed on the Project by ENGINEER at the indicated labor classifications of ENGINEER as set forth on the ENGINEERS hourly rate schedule attached hereto and adopted herein by reference. These rates encompass all elements of compensation, indirect expense and reimbursement including but not limited to profit, salary cost, general overhead, general overhead cost, payroll burden, indirect expenses, computing systems, special health and safety requirements of the Occupational Safety and Health Administration (OSHA), and telecommunications services, but not direct expenses and are subject to annual calendar year adjustments not to exceed the Consumer Price Index. The hourly rate and/or the per diem hourly rate does not include direct expenses.

G. **General Overhead.** That, for the purpose of defining general overhead, general overhead costs are defined as a percentage of all firmwide direct salaries on all client projects necessary to cover salary overhead, defined as all firmwide taxes, payments, benefits, and premiums such as, but not limited to, workmen's compensation insurance, social security, state and federal unemployment insurance, medical-hospital insurance, salary continuation insurance, pension plan costs, and pro rata allowances for vacation, sick leave, and holiday pay applied as an average percentage of the direct salary, all indirect salaries, incentive and retirement pay, buildings and equipment, taxes, licenses, insurance, professional education, cost of acquiring and maintaining computers, developing software and training staff, recruiting costs, business development expenses, general printing and reproduction costs, library and periodical expenses, business development expenses, executive, administrative accounting, clerical salaries and expenses, and all other generally accepted overhead expenses. General overhead also includes labor burden, indirect expenses and profit.

H. **Owner.** All references to OWNER to this agreement shall be construed to refer to the City of Tuscaloosa, Alabama, a Municipal Corporation, or its designated representative.

I. **Project.** Shall refer to the public work(s) as generally described herein or any phase or portion thereof and to which the engineering services pursuant to this AGREEMENT relate.

J. **Salary Cost.** That, the ENGINEER'S salary costs are defined as the amount of the wages or salaries of the ENGINEER'S employees including ENGINEER if not a corporation, working on the project(s) as reflected by the Engineer's hourly rate schedule. Salary costs are further described as the direct salary. Salary costs are included in general overhead and in the hourly or per diem hourly rate.

K. **Singular/Plural:** The singular shall include the plural and vice-versa, unless the context clearly indicates otherwise.

L. **Substantial Completion:** Shall be that degree of completion of the Project or a defined portion of the Project, as evidenced by the ENGINEER's written notice of substantial completion, sufficient to provide the OWNER, at its discretion, the full time use of the Project or defined portion of the Project for the purposes for which it was intended. "Substantial Completion" of an operating facility or operating component of the Project shall be that degree of completion that has provided a minimum of seven (7) continuous days of successful, trouble free operation of the facility in a "fully automatic" manner acceptable to the OWNER and ENGINEER and with all redundant systems fully operational. All equipment contained in the Project, plus all other components necessary to enable the OWNER to operate the facility in a manner that was intended shall be complete on the substantial completion date.

M. **TCP: "Traffic Control Plan":** A plan to regulate the flow of traffic at a minimum in accordance with the Manual on Uniform Traffic Control Devices for Streets and Highways, Latest Edition, Federal Highway Administration.

N. **Trade Contracts or Contractors:** Shall refer to multiple prime contractors on one project usually utilizing a construction management format. Each trade contract represents a significant construction activity performed concurrently with and closely coordinated with activities on the project under other trade contracts.

ARTICLE 3 - SCOPE OF SERVICES

GENERALLY: For the respective sums and subject to the respective maximums as set forth in Article 14 hereof, the ENGINEER agrees to perform for OWNER, for the above described Project, the professional services necessary for the design, bidding, and construction of the Project as set forth in this contract. The engineering and related services for the Project referred to within this AGREEMENT shall generally include, but are not limited to the services set forth herein, including coordinating and cooperating with other persons, firms and companies under contract with the OWNER. To the extent applicable to the Project, during the design and construction, the ENGINEER shall comply with any of the OWNER'S APPLICABLE DESIGN CONSIDERATIONS for the type of project. However, such DESIGN CONSIDERATIONS shall be utilized only as minimal considerations and by no means include or reference all considerations necessary for an acceptable or proper design. The work of the ENGINEER shall result in the project functioning in accordance with the intent of the OWNER. It is the intention of the Owner that the project to which this AGREEMENT pertains, reliably and properly serve the purpose for which it was designed and constructed.

If no consideration is indicated in Article 14 for the respective engineering services, it is the intention of the parties that those particular services not be provided or performed unless it is otherwise indicated to be included within another service.

Effect of State and Federal Laws and Regulations. The Scope of Services as defined herein and as provided by ENGINEER are based upon those federal and state laws, regulations or requirements in effect on the date of execution of this agreement. State or federal laws, regulations or requirements enacted or promulgated after the date of said execution shall automatically be incorporated by ENGINEER into the Scope of Services to the extent applicable. If

such incorporation substantially increases the level of effort required of the ENGINEER, the basis of the compensation as defined herein shall be subject to renegotiation between the parties. It shall be the responsibility of the ENGINEER to promptly notify OWNER of any such changes in state or federal laws or regulations or requirements which would effect his/her scope of services or level of effort.

In addition to fulfilling all requirements of this AGREEMENT, ENGINEER shall perform for OWNER the following services:

A. Preliminary Design Services: The ENGINEER shall prepare preliminary design documents for approval by OWNER consisting of preliminary drawings, and other services and documents, which among other matters shall illustrate the scale and relationship of the project components, fixing and describing the size and character of the entire project, including if applicable or feasible, location, alternate routes, materials and such other elements as may be appropriate. Included in preliminary design shall also be the following:

1. **Preconstruction Activities:** ENGINEER shall conduct pre-construction activities consistent with accepted engineering practices, including but not limited to preliminary and design surveying, soil evaluations, public meetings, predesign conference with all utilities with facilities in the project area, or meetings with interested entities, estimates of probable construction cost, all required public notices and hearings (as required by state or federal governments), federal and state applications and compliance with the same.
2. The ENGINEER shall prepare and formulate an engineering plan for the Project(s), including but not limited to attending meetings with City representatives, contact, collect, review, study and evaluate all previous reports, plans and studies in the Project(s) area, including but not limited to utilities, rights-of-way, drainage, etc. Assemble, review and evaluate all subsurface information available. Collect property ownership information.
3. Establish design criteria. Contact all involved utilities and agencies that may have criteria that would affect the design process, particularly any agency that may have jurisdiction affecting the location, design, environmental, historical and/or archaeological impact of the Project(s).
4. Attending coordination and consultation meetings with the OWNER'S staff to obtain input into the design process. Attendance of one (1) meeting (per month) at OWNER'S request and at locations specified by OWNER, per project, is included within the Scope of Services. These meetings are for the benefit of the OWNER. Additional meetings may be necessary for the ENGINEER to obtain information required by the ENGINEER. The ENGINEER shall consider OWNER preferences in the design.
5. Evaluate alternative routes. Factors to be considered in evaluation include, but are not limited to:
 - Right-of-way acquisition
 - Traffic control
 - Utility conflicts
 - Constructability
 - Construction cost
 - Soil conditions
6. Preparing preliminary design documents to include, but not limited to the following, where applicable:
Preliminary layouts showing all major utilities, etc., which could be located through the exercise of due diligence.
NOTE: The Engineer's attention is called to the Major AT&T cross country trunk lines located in Tuscaloosa.
 - Geotechnical investigation and report to include field services and other design testing as well as all other studies or surveys shall be included.

- Interconnection and valving.
- Realignment of routes.
- Construction cost estimates.
- OWNER approval of sites or easements shall be obtained as soon as possible to expedite acquisition. ENGINEER shall provide current ownership information for all necessary acquisitions including name of owner, address of owner, source of title, and the associated tax parcel identification number.
- Sites for all facilities.
- Descriptions, capacities, piping schematics, sketches, and/or preliminary drawings of all facilities as needed to convey design and performance concepts to OWNER and others.

It is recognized that portions of the Preliminary Design may have to be submitted prior to the Complete Preliminary Design in order to obtain OWNER concurrence of concepts prior to incurring cost and time for concepts that may be determined unacceptable.

7. **Utility Location and Conflicts:** The Engineer shall locate and identify all utilities within the project area and reflect the same on the preliminary plans. The Engineer shall determine the necessity for relocation and/or areas of relocation for each utility within the Project area that conflicts with the Project. The engineer shall contact each such utility and coordinate with their respective representative's relocation activities if necessary. In regard to City utilities (water, waste water, storm drainage, fiber optic and/or telecommunications, etc.) the Engineer shall, during preliminary design, locate the same both horizontally and vertically as they exist within the project area. If it appears that any City utilities so located may conflict with the Project, the Engineer shall notify the appropriate department of the City, in writing, during preliminary design phase. The Engineer shall then confer and coordinate with such City representative in regard to the best course of action to address the City utility conflict or relocation of the same during and prior completion of final design and incorporate within final design and the contract documents the appropriate solution to address City utility conflicts.
8. Furnish to OWNER, on at least a monthly basis, a progress report and appropriate interim work products. (Although the same will not be considered submission of completed or draft preliminary design, it will be used by OWNER to facilitate its review of the ENGINEER'S progress on preliminary design submittal documents and shall not obligate OWNER to review these documents within a particular time frame.
9. Submittal of five (5) sets of draft preliminary design documents to OWNER for OWNER staff and OWNER representative review and comment. (These draft preliminary documents shall be complete.) After OWNER review, the ENGINEER shall modify the preliminary design documents in accordance with the comments by the OWNER.
10. Preparing a budget - estimate of probable construction cost based on the preliminary design documents. The ENGINEER's estimate of construction cost of the Project is \$ 1,817,208.00
11. Submittal of five (5) sets of completed preliminary design documents to OWNER to review and approve. These preliminary design documents shall be complete and address all comments of OWNER. In addition, the ENGINEER will provide the OWNER with Microstation software electronic files of all design drawings prepared for this project.
12. Make required application and submissions, and meet with and obtain reviews, approvals and permits for the Project, from applicable county, state or federal regulatory agencies. Assist OWNER in obtaining consents and approvals from any FHA rural water authorities or districts. If the Project is funded, in whole or in part, by the proceeds of a loan to the OWNER from the State Revolving Fund (SRF) either water or sewer, or a grant or funding from the Federal Highway Administration (FHA or ISTEAs), the Department of Housing and Urban Development (HUD), the Community Development Block Grant Program (CDBG), the State of Alabama Department of Transportation (ALDOT) or any other State or Federal agency or combination thereof, the

ENGINEER shall conduct all services in conformance with applicable regulations and requirements, including but not limited to approval of plans, specifications, invoices, and providing the required certifications and obtaining the required approvals. Without limiting the generality of the foregoing the ENGINEER's attention is called to the necessity to comply with the State of Alabama Department of Transportation Guidelines for Operations in regard to the procedures for processing State and Industrial access funded projects for cities and counties.

13. The ENGINEER shall perform design testing including but not limited to geotechnical investigations (field services and test drilling), for the compensation for such services as set forth in this agreement, unless already performed under separate contract. The ENGINEER shall determine, as part of preliminary design services, if archeological or historical, as well as Wetlands, environmental or endangered species studies or surveys of sites, easements or any area of the project is needed and so advise the OWNER. If this agreement provides compensation for such services, then the ENGINEER shall have such studies or surveys performed.

B. Final Design Services: The ENGINEER shall not proceed with final design services until the completed preliminary design documents have been approved by the OWNER. Final design services shall be performed by ENGINEER, to further fix and describe the project with such accuracy and detail so as to enable the Contractor or Contractors as the case may be, to bid and construct the project, and minimize potentials for construction changes, construction additions, claims, delays, omissions, or conflicts, including but not limited to the following:

1. Attending periodic coordination and consultation meetings with the OWNER'S staff to present work completed or underway at the time of the meeting and to obtain OWNER input. Attendance of one meeting, per month, at OWNER'S request and at a location specified by OWNER, per project is included within the scope of services. These meetings are for the benefit of the OWNER. Additional meetings may be necessary for the ENGINEER to obtain information required by the ENGINEER.
2. At its option, the OWNER may elect to furnish certain Standard Specifications and/or Contract Documents including front-end legals, general conditions, and/or technical specifications to the ENGINEER for use on this project. The ENGINEER shall modify these standard specifications (by special conditions) to meet the requirements of this contract for this project. The furnishing by the OWNER of any such standard specifications or Contract Documents in no way reduces the responsibility of the ENGINEER for the correctness and completeness of the specifications or Contract Documents or any other aspect of the work for this project. The ENGINEER shall modify and revise such standard specifications or Contract Documents by special conditions as he deems necessary in order to perform service for OWNER as required herein and complete the project.
3. Submittal of five sets of preliminary construction Contract Documents, including plans and specifications on each project to the OWNER or OWNER'S representative for review when each design is approximately two-thirds complete for each project. Mark the printing date on these and subsequent sets of documents. Transmittal of relevant portions of plans and specs to affected utilities.
4. Design criteria; Federal and State rules and regulations: The work designed shall be "first class" in all respects and shall comply with all applicable design and construction standards and regulations including but not limited to standards of the Alabama Department of Transportation, Federal Highway Administration, the U. S. Army Corps of Engineers, ADEM, NFPA, ACI, AISC, applicable storm water regulations and applicable building codes. The work designed shall be submitted to the applicable regulatory agencies and offices by the ENGINEER for approval or review as required and the documents shall be modified by the ENGINEER to meet all code and regulatory requirements.

It shall be the responsibility of the ENGINEER to make a determination and advise the OWNER's representative, in writing, as to whether or not or to what extent permit(s), license(s), consent(s)

or studies are required by any Federal, State or Local Government or agency for the Project. Without limiting the generality of the foregoing, ENGINEER shall make such determination and advise the OWNER's representative, in writing, whether or not a permit is required for any of the following:

Wetlands (Sec. 404 Clearwater Act), Storm Water (Phase I and Phase II) (33 USC §1342 et seq., Ala. Code §§22-22A-1 – 22-22A-14), threatened or endangered species, archeological or historical (cultural) sites, and/or hazardous materials.

The OWNER may elect to have the ENGINEER perform any such permitting, licensing or study services pursuant to Article 6. "Additional or Extra Services."

5. All design and building specifications for new or renovated buildings and/or other facilities, to the extent applicable, shall comply with the Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG) as promulgated by the U.S. Architectural & Transportation Barriers Compliance Board. All construction work done pursuant to said design and building specifications shall comply with the ADAAG. The ENGINEER will design said work and verify through observation that the work complies with the ADAAG.
6. Provision of final surveying to establish vertical and horizontal control for design and construction and for easements, rights-of-way, and/or land purchase. The ENGINEER shall obtain permission, written where feasible, from property owners prior to entering upon the same for surveying or any other purpose. The ENGINEER shall take reasonable measures to prevent damage to property and repair damage where practical.
7. Development of final construction cost estimates.
8. Preparation of correct legal descriptions and plats for deeds, rights-of-way, easements, and permits. Said legal descriptions and plats to include current ownership information, source of title, and tax parcel identification number. OWNER will provide form deeds or prepare deeds for rights-of-way and/or easements for use by ENGINEER upon ENGINEER's request. ENGINEER shall complete preparation of legal descriptions and plats in a prompt and timely manner, well in advance of bidding, so as not to delay or interfere with contractor performance. ENGINEER shall assist OWNER in negotiating or obtaining easements, deeds or rights-of-way. If condemnation is necessary, the ENGINEER shall assist OWNER as needed, including services as an expert witness.
9. The final plans and specifications provided by the ENGINEER shall bear the stamp of a professional engineer registered in the State of Alabama who is a full time employee of the ENGINEER (not a subconsultant). Each plan sheet, regardless of whether or not prepared by a subconsultant to the ENGINEER, shall bear the signature or be initialed by a professional engineer, registered in the State of Alabama, who is a full time employee (not a subconsultant) of the ENGINEER.
10. Five (5) sets per project of draft final Contract Documents including plans, specifications, and contracts, etc., shall be submitted to the OWNER for review and comment. These documents shall be complete and include all work known by the ENGINEER to be necessary in ready-to-bid documents. After OWNER review, the ENGINEER shall modify the Contract Documents in accordance with comments by the OWNER. Bid documents shall contain all provisions required for municipal contracting under Alabama Bid Law and other statutes.
11. Submission of five (5) sets per project of completed, ready-to-bid final Contract Documents (including plans, specifications, contracts, etc.) to OWNER for review and approval. After OWNER review, these Contract Documents shall again be modified, if necessary, by the ENGINEER and shall address all comments of OWNER, and be final Contract Documents.
12. Preparing final Contract Documents (including plans, specs, etc.) ready for competitive bidding.
13. Prepare definitive estimate of probable construction cost based upon final design documents.
14. Prepare Traffic Control Plan if required by provisions of Article 3.D. §11 "Traffic Control Plan."

C. Bid Phase Services: The ENGINEER shall provide the following Bid Phase Services per project:

1. Conducting pre-bid conferences.
2. Providing and coordinating bid phase activities including but not limited to the following activities:
 - Provide stamped bid plans and bid documents in PDF Internet ready format (to be included on the Office of the City Engineer's Web page) to Office of the City Engineer one week prior to the advertisement for bids.
 - Preparing and place advertisements for bids (Cost of advertisement to be paid by OWNER) pursuant to Ala. Code §39-2-2(a) (1975).
 - Reproduction, distribution and handling of plans, specifications and Contract Documents to bidders, pursuant to Ala. Code §39-2-3 (1975).
 - Accept deposits from bidders (not in excess of twice the cost of reproduction and handling) and make refunds of deposits as required by Ala. Code 39-2-3 (1975).
 - Provide adequate number of copies of Contract Documents for OWNER and all State or Federal agencies.
 - Communicate with bidders and address questions and issues raised by bidders.
 - Provide technical interpretations.
 - Prepare addenda to specifications or plans.
 - Assist OWNER in letting contracts including bid openings, presence at Council Meeting pertaining to the same and opening of bids.
 - Promptly analyze and prepare written tabulations of bid proposals.
 - Evaluate and return bid bonds in accordance with Ala. Code §39-2-4(a) and Ala. Code §39-2-5 (1975).
 - Recommend contract award to OWNER.
 - Notify successful bidder of conditional award, Ala. Code §39-2-6 (1975).
 - Promptly prepare Contracts Documents for execution by successful bidder, present to bidder for execution and verify prior to delivery to the OWNER that the same are properly executed with all necessary supporting documents including bonds and insurance, pursuant to Ala. Code §39-2-8 (1975).
 - Conclude OWNER execution of Contract Documents pursuant to Ala. Code §39-2-9 and issue notice to proceed pursuant to Ala. Code §39-2-10.
3. In the provision of Bid Phase Services to the OWNER, the ENGINEER, if the Scope of Engineering Services or the project provides for the purchase of materials for the construction, modification, alteration, or repair of any publicly owned facility, shall not specify in any bid document the use of materials or systems by a sole source, unless the ENGINEER in accordance with Ala. Code §41-16-57(b)(1975) or Ala. Code §39-2-2(f) (1975), performs the following:
 - Documents to the satisfaction of the City Council that the "sole source" product or service is of an "indispensable" nature, that there are no other viable alternatives, and it has been determined that only this particular product, material, system or service fulfills the function for which the product is needed. Frivolous features will not be considered.
 - The sole source specification is recommended by the ENGINEER of record and the ENGINEER documents that there is no other product available and that the use of the requirement is of an indispensable nature and why.
 - All Information substantiating the use of a sole source specification is documented by the ENGINEER in writing and maintained by the ENGINEER and provided to the OWNER at the time of advertisement for bids.

NOTE: Sole source requirements above do not apply to the construction, reconstruction, renovation or replacement of public roads, bridges, and water and sewer facilities.

4. **Rebid cost bid exceeds budget, revisions, etc.:** In the event the total of the lowest bid(s) received by the OWNER for the project exceeds the ENGINEER'S final construction cost estimates provided prior to bidding, the ENGINEER agrees to make such revisions and modifications to the plans and specifications necessary to reduce the cost of the project to an amount not in excess of said construction cost estimate and will perform the incidental work and furnish the number of necessary documents as required by the AGREEMENT.

The ENGINEER will be compensated pursuant to the terms and conditions to be agreed upon at that time for revising plans and specifications if the bid overrun is up to 10% of the final construction cost estimate of the ENGINEER. Provided, however, if the bid overrun exceeds 10% of the ENGINEER's final construction cost estimate, then the ENGINEER will revise all plans and specifications for rebidding at no cost to the OWNER.

D. Engineering Services During Construction In the event the City determines to proceed with the construction of the project, then the ENGINEER shall perform the following services for OWNER:

1. **ENGINEER, OWNER'S Representative:** The ENGINEER shall be a representative of the OWNER during the construction of the project(s) and shall advise and consult with the OWNER or the OWNER'S representatives. With the possible exception of administering codes, laws and regulations, the OWNER'S instructions to the CONTRACTOR shall be forwarded through the ENGINEER. Provided, however, OWNER reserves the right to communicate directly with Contractor, but under such circumstances the OWNER shall keep ENGINEER informed of the nature of such communications. The ENGINEER shall have authority to act on behalf of the OWNER, but only to the extent provided for herein and in the Contract Documents.
2. **Generally:** Although the ENGINEER does not guarantee the performance of the CONTRACTOR, it shall be the duty of the ENGINEER (1) to require the CONTRACTOR to strictly adhere to the plans and specifications of the Contract Documents, (2) to use his best efforts to secure faithful performance of the contract by the Contractor, (3) to guard the OWNER against defects and deficiencies in the work of the CONTRACTORS or subcontractors and (4) to promptly advise the OWNER verbally and promptly notify the OWNER in writing of any significant departure in the quality of the materials or workmanship from the requirements of the plans and specifications, any significant problem with the work or potential claims.

The ENGINEER shall keep the OWNER informed of the progress of work under this AGREEMENT and shall promptly advise the OWNER of any factors, occurrences, or developments that may necessitate modifications, revisions, or amendments to this AGREEMENT or the Contractor's Agreement. If the ENGINEER anticipates incurring cost for extra design, drafting, supervision, or other expenses due to changes requested by the OWNER in the project, ENGINEER shall immediately notify OWNER of the same in writing. The ENGINEER shall be equitably paid for such expenses and the services involved, provided that an amendment to this AGREEMENT is executed for said extra work prior to the performance of the same by the ENGINEER.

3. **Preconstruction Conference:** Conduct a Preconstruction Conference, prepare and distribute to the attendees and City representatives, a written summary of the conference.
4. **Observations of Project by ENGINEER: etc.** The ENGINEER shall make periodic visits to the project site, familiarize himself with the progress and quality of the project and determine if the project is proceeding in accordance with the Contract Documents. On the basis of his on-site observations as an ENGINEER, he shall guard the OWNER against defects and deficiencies in the work of the CONTRACTOR, and against claims for extra payment from the CONTRACTOR.

While the ENGINEER shall not be responsible for construction means, methods, techniques, sequences, procedures, or for safety precautions and programs in connection with the construction of the project, this shall not absolve the ENGINEER from duties to inspect and administer the project as set forth herein with reasonable skill and care.

Administration of the construction contract by the ENGINEER shall include regular inspections by the appropriate architectural or engineering professionals who prepared or assisted in the preparation of the plans and specifications for the work on the project.

The ENGINEER shall also in coordination with the OWNER conduct detailed substantial completion and final inspections and prepare punch list of all items not in full compliance with the construction contract. The ENGINEER will make follow-up inspections to determine that punch list items have been completed prior to final payment. The ENGINEER shall conduct an inspection thirty (30) days prior to the end of the CONTRACTOR'S guarantee period. In addition, inspections by the ENGINEER must be at critical phases of the project, and in no case less than two inspections each week. Additional inspections shall be made as necessary or if required by OWNER or OWNER'S representative. The ENGINEER shall promptly furnish the OWNER and each of the OWNER'S designated representatives, a copy of his written report of each inspection by him or his representative, and also summary reports of inspectors, engineers and architects. The reports shall note any deficiencies in the work.

During construction the ENGINEER shall hold a status/progress meeting with the Contractor at least monthly. ENGINEERS shall prepare a detailed written summary of the meeting within and distribute it to the attendees, including the OWNER, and the OWNER'S program coordinator within five (5) days after the completion of the meeting.

5. **Authority of ENGINEER:** The extent of the duties, responsibilities and limitations of authority of the ENGINEER during construction shall not be modified or extended beyond the scope as stated herein, without written consent of the OWNER and the ENGINEER.

The ENGINEER shall have authority to reject work by the CONTRACTOR on the project which does not conform to the Contract Documents and specifications. The ENGINEER shall also have authority, subject to consent of the OWNER, or OWNER'S designated representative, to require the work to stop whenever, in his reasonable opinion, it may be necessary for the proper performance of the plans and specifications.

The ENGINEER may interpret the requirements of the Contract Documents. In such capacity, the ENGINEER shall render interpretations necessary for the proper execution or progress of the work with reasonable promptness on written request of either the OWNER or the CONTRACTOR. However, the City of Tuscaloosa, as OWNER, reserves the right to render its own interpretation of the Contract Documents.

Interpretations and decisions of the ENGINEER shall be consistent with the intent of and reasonably inferable from the Contract Documents and shall be in written or graphic form. In the capacity of interpreter, the ENGINEER shall endeavor to secure faithful performance by the CONTRACTOR.

6. **Bid Law; Change Orders:** It shall be the responsibility of the ENGINEER to require compliance with the Alabama Bid Law, Section 41-16-50, et seq., Ala. Code (1975), §39-1-1, et seq. (1975), §39-2-1, et seq. (1975), and §39-3-1, et seq. (1975), by the CONTRACTOR on the project. ENGINEER shall determine if a change order is needed in any given case during the performance of the contract. If the ENGINEER determines that a change order is needed, then he shall prepare a written change order, stating all pertinent facts and making necessary findings of fact as required by the change order language in the contract, including a determination of whether a change order meets the criteria and should be allowed, and submit the same to the OWNER'S designated representative for approval or disapproval by the OWNER. All change orders which would (1) increase or decrease the contract sum or construction bid price, (2) extend the contract time, or (3) materially change the CONTRACTOR'S scope of work or services, shall be approved by the City Council prior to performing the work addressed by the change order. Change orders shall be allowed only under the following conditions: 1) Minor changes for a total monetary amount less than that required for competitive bidding; and/or 2) Changes for matters incidental to the original contract necessitated by unforeseeable circumstances arising in the course of work under the contract; or 3) Changes due to emergencies; and/or, 4) Changes provided for in the original bidding and original Contract Documents as alternates. Change orders shall not exceed ten (10) percent of the total contract sum.

An emergency affecting the health, safety or welfare of the public or anyone shall be promptly addressed by the CONTRACTOR at his own risk.

The ENGINEER shall require the CONTRACTOR to obtain the consent of the surety prior to the execution of change orders and verify to the OWNER or to the OWNER'S designated representative, in writing, that said change orders have been satisfactorily implemented within a reasonable period of time after approval of the change order.

The ENGINEER has authority to order minor changes in work not involving any adjustment to contract sum, construction bid price, extension of the contract time, or a material change in the contract scope of work or services; however, he shall promptly notify OWNER of such orders.

The ENGINEER shall promptly transmit written notifications from Contractor regarding the performance of work that the Contractor deems extra and obtain OWNER'S approval prior to authorizing such extra work.

Any construction contract documents prepared by the ENGINEER, or supervised and/or administered and/or inspected by the ENGINEER, pursuant to this contract, shall contain standard City of Tuscaloosa change order provisions consistent with the provisions herein and, shall not contain clauses pertaining to change orders which conflict with the same or the foregoing provisions.

7. **Certificates of Payment:** As part of the administration and supervision of the contract, the ENGINEER shall determine the amount owing to the CONTRACTOR on the project based on observations at the site, inspections and on evaluations of the CONTRACTOR'S application for payment, and other pertinent information, and shall issue Certificates of Payments in such amounts provided for in the Contract Documents, after verifying in writing to the OWNER that the work which the CONTRACTOR is requesting payment on the application has, to the best of his knowledge, information and belief, been performed by the CONTRACTOR, including any change orders pursuant to the contract terms and conditions.

The issuance of a Certificate for Payment shall constitute a representation by the ENGINEER to the OWNER, based on the ENGINEER'S observations and inspections at the site as provided herein and on the date comprising the CONTRACTOR'S application for payment, that the project has progressed to the point indicated; that, to the best of the ENGINEER'S knowledge, information and belief, the quality of work is in accordance with the Contract Documents (subject to an evaluation of the project's full conformance with Contract Documents upon substantial completion, to the results of any subsequent test required by or performed under the Contract Documents, to minor deviations from the Contract Documents correctable prior to completion, and to any specific qualifications stated in the Certificate for Payment); and that the CONTRACTOR is entitled to payment in the amount certified.

The ENGINEER shall approve payment to the CONTRACTOR only for that work which is completed. For work not fully and satisfactorily completed, the ENGINEER shall withhold payment in addition to the normal retainage being withheld on the contract.

The issuance of a Certificate for Payment shall not be a representation that the ENGINEER has made any examination to ascertain how and for what purposes the CONTRACTOR has used the money so paid. However, if there is a provision in the contract to pay the CONTRACTOR for materials stored on the job site, the ENGINEER shall obtain from CONTRACTOR, prior to the next payment, written certification from the materials suppliers that previous monies paid for materials stored on the job site have been paid to the supplier of the materials.

If the ENGINEER does not have written substantiation that the CONTRACTOR has paid for such materials, the ENGINEER shall deduct the appropriate amount from the then current Certificate of Payment. If the OWNER is utilizing a procedure with the CONTRACTOR in regard to sales and use tax purchases whereby the CONTRACTOR acts as the purchasing agent of the City in regard to certain material, the ENGINEER shall assist the OWNER as an additional service for the fee set forth herein in implementing and administering the procedure.

After issuance of final payment, the ENGINEER shall coordinate with OWNER and notify the CONTRACTOR in writing of the beginning and ending of warranty periods.

Review, verification and approval of CONTRACTOR'S request for payment must be accomplished within the time period stated in the Contract Documents less ten (10) days for OWNER'S processing.

8. **Compliance with Laws, etc.:** As part of the engineering services herein for supervision and administration of the construction of the project, the ENGINEER shall have the responsibility for filing documents required for the approval of governmental authorities having jurisdiction over the project. The ENGINEER shall also comply with all applicable Federal, State and local laws, regulations and ordinances, including but not limited to the Rehabilitation Act of 1973, the Americans with Disabilities Act, the Civil Rights Act of 1964, and any regulations promulgated thereunder, during the duration of this AGREEMENT. Failure of the ENGINEER to comply with said laws, rules, regulations or ordinances may result in this AGREEMENT being subject to termination by OWNER. ENGINEER shall not discriminate on the basis of age, race, sex, religion, national origin or disability.
9. **Access:** The ENGINEER shall at all times have access to the project after acquisition by OWNER whenever it is in preparation or progress and shall insure in the Contract Documents that both OWNER and ENGINEER have the right of access to construction site.
10. **Submittals, etc.:** The ENGINEER shall promptly review and comment, within ten (10) working days after ENGINEER'S receipt of the submittals, to the CONTRACTOR and the OWNER, on CONTRACTOR'S submittals, shop drawings, samples and other submissions for conformance with the design concept, plans and specifications of the project so as not to delay the project.
11. **Traffic Control Plan:** The ENGINEER shall review the CONTRACTOR'S Traffic Control Plan (TCP) prior to construction for conformity to the Manual on Uniform Traffic Control Devices for Streets and Highways, Latest Edition, Federal Highway Administration, and review modifications and revisions to the TCP by the CONTRACTOR as needed to keep pace with progress of work, change orders or at the request of the City. All modifications or revisions by the CONTRACTOR to the TCP shall be submitted to the City of Tuscaloosa Department of Transportation prior to implementation.
If the respective paragraph in Article 14 indicates ENGINEER will be compensated for a Traffic Control Plan (TCP); then the ENGINEER shall be responsible for the development and design of the TCP, rather than the CONTRACTOR. Such design shall conform to the Manual on Uniform Traffic Control Devices for Streets and Highways, Latest Edition, Federal Highway Administration, at a minimum, and shall be submitted to the City Traffic Engineer, for review, prior to construction. ENGINEER shall modify and revise the TCP during construction to keep pace with the course of work, change orders or at the OWNER'S request. All modifications shall be submitted to the Traffic Engineer of OWNER.
12. **Substantial Completion/Final Completion and Payment:**

(a) When the CONTRACTOR considers that the Project, or where acceptable to the OWNER, a designated portion thereof, substantially complete, the CONTRACTOR shall prepare and submit to the ENGINEER a list of items to be completed or corrected and request an inspection for substantial completion. Thereafter, the ENGINEER shall promptly conduct such an inspection and/or if an operating facility, after a minimum of seven (7) continuous days of successful, trouble free operation has been achieved during startup, the ENGINEER may in his/her professional judgment, issue a written notice of substantial completion for the purpose of establishing a start date of specific equipment guarantees and/or warranties and to establish the date that the OWNER will assume the responsibility for the cost of operating such equipment.

Subsequent to and based upon said inspection, the ENGINEER shall prepare a punch list of all items not in full compliance with the construction contract and make follow up inspections to determine that punch list items have been completed by the CONTRACTOR or CONTRACTORS prior to final payment or determination of substantial completion as the case may be.

"Substantial Completion" shall be that degree of completion of the Project or the defined portion of the Project, as evidenced by the ENGINEER'S written notice of substantial completion, sufficient to provide the OWNER, at its discretion, the full time use of the Project or defined portion of the Project for the purposes for which it was intended. "Substantial Completion" of an operating facility or operating component of the Project shall be that degree of completion that has provided a minimum of seven (7) continuous days of successful, trouble free operation of the facility in a "fully

automatic" manner acceptable to the OWNER and ENGINEER and with all redundant systems fully operational. All equipment contained in the Project, plus all other components necessary to enable the OWNER to operate the facility in a manner that was intended shall be complete on the substantial completion date.

The ENGINEER's notice of substantial completion shall not be considered as final acceptance of any portion of the Project or relieve the CONTRACTOR from completing the remaining work, including any remaining performance or acceptance testing, within the specified time and in full compliance with the contract documents. Written notice of substantial completion shall not relieve the CONTRACTOR of his obligation to promptly remedy any omissions in latent or unnoticed defects in the Project covered by the written notice of substantial completion and the ENGINEER shall continue to perform follow up inspections to determine whether or not and to what extent punch list items have been remedied prior to final payment.

- (b) Final Inspection. Upon notice from the CONTRACTOR that the work is complete, the ENGINEER shall make a final inspection of the Project and conduct test or tests if applicable. The ENGINEER shall notify the OWNER'S representative of the time and date of such inspection. The ENGINEER shall notify the CONTRACTOR of all apparent and/or visible instances where the work on the Project fails to comply or meet the plans and specifications in the contract documents, as well as any defects in or deficiencies he/she may discover. The ENGINEER shall then develop a written report and punch list of such defects and deficiencies and delivery a copy of the same to the CONTRACTOR and the OWNER's representative. The ENGINEER shall make follow up inspections to determine whether or not and to what extent such defects and deficiencies have been corrected by the CONTRACTOR.

Upon completion of all such repairs and correction of defects in a manner satisfactory to the ENGINEER, the ENGINEER shall make a determination that the Project is acceptable and complete pursuant to the contract documents. The ENGINEER shall notify the OWNER and the CONTRACTOR in writing of such determination and ensure that the CONTRACTOR and/or OWNER as the case may be, conduct publication of final completion. The ENGINEER shall ensure that the CONTRACTOR fulfills all of the terms and requirements for final completion of the Project in accordance with the contract documents, including obtaining from the CONTRACTOR and providing to the OWNER, all warranties, guarantees, manuals and release of liens. The ENGINEER shall then upon satisfactory completion by the CONTRACTOR of all terms and conditions required for final completion and final payment, pursuant to the contract documents, issue a certificate of payment and notify the OWNER in writing that the Project is complete in accordance with the contract documents and final payment is due the CONTRACTOR.

- (c) Inspections During Warranty and Guarantee Period. The ENGINEER shall inspect, cooperate and assist the OWNER during any warranty or guarantee period for the Project or any component or facility therein, coordinating with the CONTRACTOR and/or subcontractors as necessary for all repairs and/or replacement necessitated by defects in materials or workmanship during the warranty period. The ENGINEER shall also conduct an inspection thirty (30) days prior to the expiration of any CONTRACTOR'S guarantee or warranty period.

E. **General Responsibilities:** The preliminary design services, the final design services, the bid phase services, and the construction phase services, including the listing of specific work elements as stated herein, is not intended to limit the work performed to only the work elements enumerated, or the general responsibility of the ENGINEER as there will be unspecified elements to the work that are necessary and typical for the successful completion of the projects in this AGREEMENT.

ARTICLE 4 - DESIGN TESTS AND OTHER STUDIES

If the respective paragraph in Article 14 indicates compensation for the same, the ENGINEER shall furnish design testing such as soil testing and/or geotechnical services, hazardous sites, archeological or historical studies or

surveys of the area of the project, as well as environmental, Wetlands, or endangered species investigations and services (unless already performed for OWNER), and any other test required or reasonably necessary for the design of this project at the compensation rate as set forth in this agreement. ENGINEER will furnish construction testing as required for the construction of this project at the unit price as specified in an attachment to this contract and paid as provided for herein. In the event there are other tests needed during construction to ensure quality of the project, ENGINEER shall promptly so advise OWNER in writing.

The ENGINEER shall require, in all Contract Documents for the construction of the project, that the CONTRACTOR perform and furnish all necessary or required structural, mechanical, chemical or other laboratory tests ("mill test"), inspections and reports, as required by law or the Contract Documents, and the ENGINEER shall inform the OWNER of such required tests, inspections and reports.

ARTICLE 5 - ADVANCED SERVICES DURING CONSTRUCTION; SDC

In the event the City determines to proceed with construction of all or any portion of the project and if the respective paragraph in Article 14 indicates compensation for the same, in addition to providing Basic Engineering Services During Construction as provided in Article 3.D, the ENGINEER shall also provide the following advanced services during construction of the project. This phase will commence with the award of the contract for construction.

A. Additional Engineering Construction Services:

- **Construction Staking:** ENGINEER shall provide certain initial surveying and related engineering services during construction including construction staking to establish horizontal and vertical control points and define the beginning and ending points of the project, topographical grade staking and locating all manholes and/or inlet structures.
- **Receiving and responding to complaints or inquiries from adjoining or adjacent property owners.**
- **Special federal or state certifications or verifications for project close-out and completion.**
- **"Record Drawings" Plans:** Within sixty (60) days subsequent to final payment to the Contractor on the project, the ENGINEER shall complete and deliver to the OWNER's representative three (3) complete sets of "record drawings" plans of the project. Such drawings shall be complete and depict, in engineering detail, all aspects of the project as actually constructed, showing all relevant matters including grades, coordinates, horizontal and vertical control points, manholes, inlets, etc., utilities and changes and/or modifications to the project occurring during the course of construction. Each set shall bear the stamp of a professional engineer registered in the State of Alabama. Each sheet shall be numbered sequentially and bear the signature or be initialed by a professional engineer registered in Alabama who is a full time employee of ENGINEER. Each set of "record drawings" plans shall be provided in a format suitable to OWNER.

B. Project Inspectors:

1. **Generally.** The ENGINEER shall provide a full-time resident project inspector or inspectors (as required) to make continuous on-site inspections to check the quality and quantity of the work and to insure that the work is proceeding in accordance with the Contract Documents and specifications. The inspector shall be continuously present at each job site of the project where major or critical work is ongoing, particularly when work which may be defective can be hidden or otherwise obscured.

Project inspectors (resident inspector) shall keep detailed daily diaries of the work on the project, including but not limited to what was performed, where it was performed, when it was performed and by whom and any other information regarding the project and these shall be available for review by the OWNER and representatives of the OWNER.

Project Inspectors shall be responsible for conducting comprehensive reviews of the work in progress to determine compliance with the Contract Documents, reporting noted deficiencies observed in the construction to the CONTRACTOR(S) and the ENGINEER, organizing field offices, equipment, and project files, clarifying with the design staff any potential discrepancies found in the Contract Documents, documenting the construction progress through the maintenance of daily log book and diary, weekly and monthly reports, and photographs, obtaining and reviewing progress schedule, reviewing with the CONTRACTOR(S) sequence of operations control, verifying that the testing laboratory performs tests and inspections as required, assisting in the final inspection(s) and other miscellaneous activities associated with a construction project.

Project Inspectors shall be experienced, qualified resident project inspectors. An inspector shall be present at specific sites of the project at all times whenever the work activity is such that the absence of an inspector may make it difficult to ascertain whether or not the work was completed in strict accordance with the Contract Documents. This includes, but is by no means limited to, the following:

- Backfilling and tamping under streets and other paved areas.
- Placement of concrete and paving.
- Connection of utilities.
- Cleaning and flushing lines.
- Disinfection.
- Testing.

If two or more such work activities are ongoing simultaneously at different sites, the ENGINEER shall provide two or more inspectors to fully and completely inspect the work. Any failure by the ENGINEER to provide such inspection services may be deemed by the OWNER to be a breach of this AGREEMENT by the ENGINEER.

2. Construction Video and Photographs. The ENGINEER shall photograph and video tape the entire project, so as to accurately depict all aspects of the same prior to, during and after construction. Photographs and videos during construction shall be at critical phases but in no event less than once a week and shall be submitted to OWNER with each request for payment.

C. CONTRACTOR'S Responsibility. Nothing in this AGREEMENT shall be construed to limit the responsibility of the CONTRACTOR to fully and completely comply with all requirements of the Contract Documents, with good construction practices, and with all laws, regulations, and other applicable requirements.

ARTICLE 6 – PERMITTING, LICENSING AND/OR STUDIES

If the respective paragraph in Article 14 indicates compensation to the ENGINEER, then the ENGINEER shall provide the specialized permitting, licensing and/or studies described herein; as follows:

A. Permits, Licenses and/or Studies: The following studies, permitting or licensing as additional services are to be provided or to be conducted pursuant to this provision if indicated by an "x" next to the applicable service, and if compensation for the same is indicated by the respective paragraph of Article 14:

Archeological: Historical: Wetlands: Endangered Species Services Etc.

- (1) Conduct environmental studies for cultural resources, threatened and endangered species, and the identification of potential hazardous material sites sufficient to comply with FHWA Technical Advisory T6640.8A dated October 30, 1987, and 23 CFR, Part 771. The archaeological phase of the cultural resource survey will identify sites that will be affected by the developed alignment to be carried forward in the environmental document.

The cultural resource report will include a recommendation as to whether the archaeological sites or structures are eligible for the National Register of Historic Places. If there are sites recommended for eligibility that cannot be avoided, a supplemental agreement may be implemented to determine if the sites are important for what can be learned by data recovery or if the sites warrant preservation in place. When given the notice to proceed with the studies on this project, the ENGINEER shall submit the following for review by the City/State: A letter from the U. S. Fish and Wildlife Service containing a list of endangered and threatened species that may exist within the project.

If threatened or endangered species are identified, qualified personnel, either subconsultant or in-house personnel will perform endangered and threatened species work. Qualifications should indicate expertise with those species involved with the proposed project. The ENGINEER shall perform all studies of endangered species in accordance with the Technical Advisory and Section 7 of the Endangered Species Act to the point where a "no effect" or a "may effect" determination can be made for the alignment under consideration. In the event of a "may effect" determination, additional studies may be required for Formal Consultation with the U. S. Fish and Wildlife Service. If additional studies are required, the CITY may enter into a supplemental agreement with the ENGINEER. Reports and data justifying this determination must be supplied to the CITY along with a proposal for the work under the supplemental agreement.

- (2) Wetland permitting and delineation will be performed in accordance with the U. S. Army Corps of Engineers 1987 "Manual for Delineating Wetlands." This shall include the completion of delineation forms provided in the manual. A copy of these forms shall be provided to the City for evaluation. Wetland evaluation shall be performed in accordance with T6640-8A.
- (3) Perform storm water assessment and permitting pursuant to applicable provisions of NPDES Phase I and Phase II, 35 USC §1342 et seq., Ala. Code §22-22A-1 through §22-22A-14 (1975) and applicable regulations. Permits shall be obtained in the name of the contractor and not that of the City, if feasible.
- (4) Obtaining letters of map revisions (L.O.M.R.). Perform the necessary fieldwork, assistance with public notification and hearings as required, coordinate all city and FEMA (Federal Emergency Management Agency) requirements with respective contact representatives, and provide civil hydraulic engineer services to prepare the necessary documents and complete the required FEMA forms to request a letter of map revision (L.O.M.R.) on behalf of the City for the project.
- (5) Additional design surveying or studies. Performing surveying activity above and beyond that normally associated with project design and/or gathering field data requiring labor intensive activity at hourly rates.
- (6) Miscellaneous studies, licensing and/or permitting for _____

B. The ENGINEER shall take all administrative and regulatory measures required to obtain any of the permits, licenses or permissions indicated as to be provided herein from the applicable regulatory agency of the State or Federal Government on behalf of the City for the Project.

All permits shall be obtained in the name of the OWNER. The OWNER will pay the amount of the permit directly to the appropriate agency. The ENGINEER shall ensure that the CONTRACTOR'S agreement requires the CONTRACTOR to comply with all terms and conditions of such permit and implement the same.

**ARTICLE 7 - LEVEL OF COMPETENCE, OWNER APPROVAL,
CONFLICTS OF INTEREST, ETC.**

The ENGINEER shall be responsible, to the level of competence presently maintained by other practicing professional engineering organizations engaged in the same type of professional services in the Southeastern United States, for the professional and technical adequacy and accuracy of the surveys, designs, drawings, specifications, bidding, Contract Documents, inspection, administration, services during construction, and other services furnished under this contract. The ENGINEER shall employ competent professional engineering consultants registered in the State of Alabama and duly licensed therein where needed subject to the same standard, to assist him or it where needed to fulfill the terms of this AGREEMENT.

The ENGINEER shall be solely responsible for the accuracy and adequacy of the construction documents, including but not limited to plans, specifications and drawings. The ENGINEER shall be solely responsible for the adequacy of engineering services during construction.

In the event damages are sought or recovery sought or obtained from OWNER by any third party based upon or arising from or attributable in whole or in part to, errors, omissions, inaccuracies or inadequacies in (1) the construction documents including plans, specifications or drawings; (2) Contract Documents (not including OWNER provided front-end legals); (3) services during construction, then the ENGINEER shall indemnify and hold the OWNER and its representatives harmless.

The ENGINEER agrees to furnish and pay for the cost of the defense (including attorney's fees) of the City of Tuscaloosa, its officers, agents, and employees from any and all claims based on the acts or omissions of the ENGINEER.

All plans, specifications, detailed drawings, approvals, etc., for engineering pertaining to this project, will be done under the direct supervision of professional engineers. All architectural plans shall be done under the direct supervision of registered architects.

Designated herewith (as applicable) are the engineering or architectural subconsultants or associates:

Design and Construction Testing – Building & Earth Sciences, Inc. (BES)

Professional Land Surveyor – Kenny Herring, P.L.S. (Synterra, formerly Herring Surveying)

All plans prepared by professional engineering or architectural consultants shall be separately identified by title, sheet number, and official registration seal or signature, and registration number. Engineering or architectural drawings shall not be combined with other drawings unless deemed to be "incidental" category.

No changes shall be made in the foregoing consultants designated without prior written notice to the OWNER. However, the responsibility for the work of all consultants and subcontractors, etc., to the ENGINEER rests solely with the ENGINEER.

Level of competence includes but is not limited to, Architect's/Engineer's service which at a minimum are in full compliance with all applicable laws, codes, regulations and rules of the city, county, state and federal governments or agencies thereof.

OWNER'S approval. All plans, drawings and specifications, Contract Documents, etc., for the project shall be submitted by the ENGINEER to the OWNER for review and/or approval. However, such review and/or approval by the OWNER and/or its employees, representatives and agents of the OWNER, of the preliminary design, the final design, the Contract Documents or any other documents are for usability and maintainability, not for adequacy,

accuracy or Code compliance and thus shall not in any way, relieve, reduce or minimize the responsibility or liability of the ENGINEER for its obligations under this AGREEMENT.

CONFLICTS OF INTEREST. The ENGINEER represents and warrants to the City that it is not aware of any conflict of interest which exists or could arise by means of its provision of services to the City pursuant to the terms and conditions of this agreement. This is an exclusive personal service agreement and ENGINEER will not represent the interest of any other person, firm or entity that conflicts with the interest of the City of Tuscaloosa in regard to the subject matter of this agreement or the performance of services pursuant to the terms and conditions hereof. It is understood by and between the parties hereto that neither the Engineer nor any of its officers, agents or employees nor any sub consultant to the Engineer nor any subsidiary, parent entity, principal officers nor any entity having a beneficial interest in any of the same, may submit a bid or proposal in response to any request for proposals or advertisement for bids resulting from the services provided in whole or in part pursuant to this agreement

ARTICLE 8 - RECORD DOCUMENTS

The ENGINEER shall furnish to the OWNER' representative for its review and approval, two (2) review sets of record drawings, plans and specifications prior to making the final record documents. The ENGINEER shall also furnish to the OWNER' Representative two (2) accurate, complete record sets of plans, specifications and drawings of the project, as finally constructed, with revisions and changes clearly shown thereon. One set thereof shall be on CD or disk, as appropriate, in CAD file format. Any file conversions necessary to make the same immediately useable by the City without further modification will be made by the ENGINEER at the Engineer's expense prior to delivery of the same to the OWNER. The other set of accurate complete record plans and specifications of the project as finally constructed shall be in print. The ENGINEER will also furnish the OWNER, after completion of construction of the project, two (2) sets of contract documents and modifications, including all change orders which shall be of a permanent nature on CD or disk as appropriate, in the format compatible with City software and hardware systems. All record documents as specified above shall be delivered to the OWNER as soon as possible after final inspection and before the final Engineer's fee is paid.

ARTICLE 9 - OWNERSHIP AND USE OF DOCUMENTS

Plans, drawings, maps and specifications, or other documents, etc., prepared by ENGINEER as instrument of service, are the property of the ENGINEER, whether the project for which they are made is constructed or not. Copies of such documents shall be promptly furnished to the OWNER by the ENGINEER. Such drawings, plans and specifications or other documents may be used by the OWNER on the project which is the subject of this AGREEMENT and also for reference and other information on other projects without any further compensation or approval by the ENGINEER. The OWNER may also make submissions or distributions of such plans, drawings, and specifications of the ENGINEER to meet request for public records , official regulatory requirements or for other purposes in connection with the project and future improvements, repairs or expansions of and connections to the project, any such submissions or distributions or usage shall not be construed as publication or use in derogation of the ENGINEER'S rights herein. The executed construction contract documents and request for proposals (less plans, specifications and drawings), bids, bid tabulations, bonds, insurance certificates, etc., shall be the property solely of the City of Tuscaloosa as OWNER.

LITIGATION ASSISTANCE. The scope and extent of engineering services to be provided under this AGREEMENT does not include costs of the ENGINEER for required or requested assistance to support, prepare, document, bring, defend, or assist in litigation undertaken or defended by the OWNER. However, plans, specifications, documents, studies and any data or information otherwise resulting from the performance of the AGREEMENT by the ENGINEER may be utilized by the OWNER in bringing, defending, or otherwise assisting in litigation undertaken or defended by the OWNER without any additional costs to the OWNER.

CONFIDENTIALITY. All documents, information, memoranda and all other such written or verbal information provided by the City to ENGINEER shall be held strictly confidential by ENGINEER and any of its subcontractors and shall not without the prior written consent of the OWNER, be used for any purpose other than the performance of this agreement, nor be disclosed to any other entity not connected with the performance of this agreement. Any entities requesting such information shall be directed by ENGINEER to contact OWNER's representative.

The ENGINEER shall not use the City's name or insignia or logo in any magazine, trade paper, newspaper or other medium without first obtaining the written consent of the City.

Pursuant to Ala. Code §36-12-40, as amended by Acts of Alabama 2004-487, neither the Engineer employed hereunder nor any subconsultant employed by the Engineer, shall at any time allow the dissemination or copying of any information exempted from public disclosure by this section and Tuscaloosa City Code §2-4(d) which specifically provides the location of critical infrastructure or critical energy infrastructure as defined in 42 U.S.C. §5195c(e) and 18 C.F.R. §388.113(c)(1) as amended belonging to or provided to the City.

COPYRIGHT INFORMATION / INTELLECTUAL PROPERTY. With the exception of reports, plans, drawings, maps, specifications, contract documents and other instruments of service as addressed herein, the parties acknowledge and agree that the intellectual property of either party shall remain the property of the respective party, including intellectual property developed during the course of this agreement in the performance of services by ENGINEER. However, the OWNER may utilize any of such ENGINEER's intellectual property for and on behalf of its internal operations, as well as maintenance, construction and repair of its facilities. With the exception of contract documents if the ENGINEER clearly marks and identifies any documents or materials it deems intellectual property and/or copyrighted information The Owner will take steps reasonably necessary with its employees with respect to the use, copy, protection, and security of such intellectual property. Provided; however, the Parties acknowledge and agree that the Contract documents including all attached or referenced plans, maps and all specifications, once executed, are public records and subject to disclosure and copying to the public pursuant to applicable state law.

ARTICLE 10 - ASSIGNMENT

The OWNER and ENGINEER, respectively, bind themselves, their partners, successors, assigns, and legal representatives to the other party, to this AGREEMENT and to the parties, successors, assigns, and legal representatives of such other party with respect to all covenants and conditions of this AGREEMENT. Neither the OWNER nor the ENGINEER shall assign, sublet or transfer any interest in this AGREEMENT without the written consent of the other. No such assignment shall in any manner whatsoever relieve any party from its obligations and duties hereunder and such assigning party shall in all respects remain liable hereunder irrespective of such assignment.

Use of subconsultants by the ENGINEER or subsidiary or affiliated firms of the ENGINEER for technical or professional services, shall not be considered an assignment of a portion of this AGREEMENT. Nothing herein shall be construed to give away any rights or benefits hereunder to anyone other than OWNER and ENGINEER. There shall be no third party beneficiaries to this AGREEMENT.

ARTICLE 11 – INSURANCE

That, the ENGINEER shall secure and maintain throughout the duration of this AGREEMENT, insurance of such type and in such amounts as may be necessary to protect its interest and the interest of the OWNER against hazards or risk of loss as herein specified and as otherwise appropriate. The underwriter of such insurance shall be qualified to do business in Alabama and shall be acceptable to the OWNER. The certificate provided to OWNER shall contain a provision that not less than ten (10) days written notice will be given to the OWNER before major policy or coverage modifications are made or before any policy or coverage is canceled. Without limiting the requirements herein set forth, the insurance coverage shall include a minimum of:

1. **Workmen's Compensation and Employer's Liability Insurance** as required by the laws and regulations of the State of Alabama.
2. **Comprehensive Automobile and Vehicle Liability Insurance.** This insurance shall be written in comprehensive form and shall protect the ENGINEER and the OWNER against claims for injuries or damages to property arising out of any act of the ENGINEER or of any of its agents or employees or subcontractors and shall cover operations with respect to on-site and off-site operation under this AGREEMENT and insurance coverage shall extend to any motor vehicles or other equipment used by the ENGINEER in the performance of this contract, irrespective whether the same is owned, non-owned or hired. The limits of liability shall not be less than \$500,000 Combined Single Limit.
3. **Commercial General Liability Insurance.** This insurance shall be written in comprehensive form and shall protect the OWNER and the ENGINEER against claims arising from injuries to members of the public, City employees, or damage to property arising out of any act of the ENGINEER or any of its agents, employees or subcontractors. The limit of liability shall not be less than \$1,000,000 Combined Single Limit.
4. **Errors and omissions insurance.** The ENGINEER shall furnish and obtain professional liability insurance coverage in an amount not less than \$500,000.00 and subconsultants shall provide limits of insurance commensurate with the responsibilities of their work.

The insurance coverage as specified above shall constitute minimum requirements and the OWNER, its officers, agents, employees associated with the project, and Program Coordinator shall be named as additional insureds in insurance coverages identified in Items 2 and 3 and shall be shown as such on the certificate of insurance. All certificates of insurance, as well as any other supporting information deemed necessary by the OWNER, shall be submitted to the OWNER prior to initiating work on this project(s). The certificate shall state that the City shall be given ten (10) days written notice of cancellation or any change in the coverage of insurance certificates shall not exclude liability for failure to notify nor shall it state "endeavor to notify" in lieu of what is required. Full aggregate limits shall apply per project. At the OWNER'S request, the ENGINEER shall submit certified copies of the complete policies.

ARTICLE 12 - STATUS OF ENGINEER

It is understood and agreed between the parties hereto that the status of the ENGINEER and his employees, officers, agents and subconsultants, shall be that of an independent contractor to OWNER and it is not intended, nor shall it be construed, that the ENGINEER, or any of his employees, officers, agents, and subconsultants, is an agent, officer or employee of OWNER for any purpose.

ARTICLE 13 – PERSONNEL

A. The ENGINEER agrees to assign experienced and competent professional personnel to provide the services to the OWNER pursuant to this agreement. The ENGINEER represents to OWNER that the following persons are so qualified and are assigned to this project or, with the consent of OWNER'S representative, individuals with similar experience and qualifications:

Project Chief Consultant: John Calvin Cassady, P.E.
Project Manager: Angela L. Henline, P.E.

B. The OWNER'S designated representative shall be Wendy Shelby, P.E., Office of the City Engineer, Infrastructure and Public Services of the City of Tuscaloosa.

C. All notices, bills, invoices and reports required by this agreement shall be sufficient if sent by the parties hereto in the United States Mail, postage prepaid thereon to the addresses noted below:

Client: Wendy Shelby, P.E.
Infrastructure & Public Services
City of Tuscaloosa
2201 University Boulevard
Tuscaloosa, Alabama 35401

Engineer: John Calvin Cassady, P.E.
The Cassady Company, Inc.
4700 Highway 69 North
Northport, Alabama 35473

D. ENGINEER represents and warrants to the OWNER that its Project Chief Consultant for the principle performance of services by ENGINEER pursuant to the terms and conditions of this agreement shall be and remain John Calvin Cassady, P.E. and there shall be no change in the Project Chief Consultant without the prior written consent of the CITY's representative.

ARTICLE 14 – COMPENSATION

The OWNER agrees to pay the ENGINEER the following compensation as indicated for the respective completed engineering services. In billing for all services or reimbursements, the ENGINEER shall submit to OWNER'S representative, upon request, timesheets and other documentation satisfactory to OWNER'S representative to support said fees or expenses. Hourly rates shall be billed as per Exhibit "B" adopted herein by reference, plus direct expenses.

A. **Preliminary Design:** The ENGINEER shall receive, for the Preliminary Design Services, after approval by OWNER, the sum of \$ 50,000.00. This amount includes any design testing unless a separate amount is stated as compensation for design testing. This amount represents the total compensation to the ENGINEER for Preliminary Design Services on all phases of the project.

B. **Final Design:** The ENGINEER shall receive, for the Final Design Services, after approval by OWNER, the sum of \$ 72,000.00. This amount represents the total compensation to the ENGINEER for Final Design Services on all phases of the project.

C. **Bid Phase:** The ENGINEER shall receive for Bid Phase Services, upon award of construction contract by OWNER, the sum of \$ 3,000.00. This amount represents the total compensation to the ENGINEER for Bid Phase Services on all phases of the project.

D. **Basic Engineering SDC:** If the City determines to proceed with construction of all or any phase of the project, the ENGINEER shall receive compensation for Engineering Services During Construction, at an hourly rate as per Exhibit "B", as services are rendered, up to the maximum sum of \$ 10,000.00. This amount represents the total compensation to the ENGINEER for Engineering Services During Construction on all phases of the project.

E. **Maximum Payments:** It is understood by and between the parties that, for providing the services in subsections A, B, C, and D, the maximum total cost to the OWNER on all projects or phases shall not exceed \$ 135,000.00, unless specifically authorized by a written Amendment to this Agreement.

F. Design Surveying: While a certain level of surveying is required for preliminary design and included within the compensation for those services, if the parties agree that the nature and extent of the project necessitate design surveying in excess of that normally required for design by indicating a compensation for those services, then the ENGINEER shall receive compensation for additional design surveying at an hourly rate as per Exhibit "B." However, the total cost to the OWNER shall not exceed \$ 5,975.00 without OWNER'S written consent.

The ENGINEER'S preliminary estimate of the cost of construction of the project is stated in "Preliminary Design," Article 3.A.10 of this agreement. The ENGINEER acknowledges that the OWNER'S agreement to the compensation amounts set forth herein was derived in part from ENGINEER'S estimate of construction cost. As a consequence, if the total bid award for construction of the project is more than 15% less than ENGINEER'S estimate, the OWNER may elect to adjust or receive a refund from ENGINEER in an amount equal to the percentage excess beyond 15% of the bid award of the ENGINEER'S maximum payment.

G. Easements/Rights-of-Way: ENGINEER shall receive compensation for easements or rights-of-way services for all the project or any phase at an hourly rate as per Exhibit "B," as services are rendered, up to a maximum sum of \$ 18,262.50. This amount represents the total compensation to the ENGINEER for these services on all phases of the project.

H. Advanced Services During Construction (SDC); Administration and Inspections: If the City determines to proceed with construction of all or any part of the project and to utilize the additional engineering construction services, project inspectors and other Services During Construction pursuant to Article 5, the ENGINEER shall receive compensation for such Services During Construction, as services are rendered, at an hourly rate as per Exhibit "B". This amount represents the total compensation to the ENGINEER for these services on all phases of the project.

The cost to the OWNER for these services shall not exceed the following amounts calculated at the hourly rates as per Exhibit "B":

Construction Staking	\$	<u>16,960.00</u>
"Record Drawings" Plans	\$	<u>3,860.00</u>
All other SDC Services	\$	<u>95,780.40</u>

Provided, however, that the cost to OWNER stated herein is premised upon CONTRACTOR completing the project on time which, if the same is not the case due to no fault of the ENGINEER, the maximum cost will be reasonably adjusted accordingly upon written notice to OWNER. The written notice will be given to the OWNER by the ENGINEER prior to incurring the extra cost and demonstrating to the OWNER's satisfaction the reasons for incurring the increased expense.

I. Design Testing: The ENGINEER shall be reimbursed by the OWNER for design testing for all the phases of the project at an hourly rate as per Exhibit "B," as services are rendered, in an amount not to exceed \$ 6,400.00. This amount represents the total compensation to the ENGINEER for these services on all phases of the project. If no amount is stated, all design testing costs are included in the Preliminary Design amount set forth herein.

J. Construction Testing: ENGINEER shall be reimbursed by OWNER for construction testing (not design testing) for all the phases of the project at an hourly rate as per Exhibit "B," as services are rendered, up to a maximum of \$ 14,315.00. This amount represents the total compensation to the ENGINEER for these services on all phases of the project.

K. Administration; Reimbursement of Expenses: ENGINEER shall be reimbursed by OWNER for the actual cost of miscellaneous fees and charges related to the project and for refunds of contract documents to Bidders in accordance with law; not to exceed a maximum of \$ 1,500.00.

L. Permitting, Licensing and/or Studies: The ENGINEER shall be reimbursed at an hourly rate as per Exhibit "B," as services are rendered, by OWNER for the specialized services as indicated in Article 6 for permitting, licensing or studies in an amount not to exceed \$ 10,503.80, without OWNER's consent. This amount represents the total compensation to the ENGINEER for these services on all phases of the project.

M. Prequalification of Bidders: If the OWNER elects to prequalify bidders pursuant to applicable provisions of the Alabama Bid Law, the ENGINEER shall be compensated at an hourly rate as per Exhibit "B," as services are rendered, but not to exceed \$ N/A. This amount represents the total compensation to the ENGINEER for these services on all phases of the project.

N. Traffic Control Plan: The ENGINEER shall receive as compensation for development and design of a traffic control plan (TCP), after submission and review by the City's Traffic Engineer, the sum of \$ 2,500.00. This amount represents the total compensation to the ENGINEER for the TCP, including revisions and modifications as the work progresses.

O. L.O.M.R.: The ENGINEER shall be reimbursed by OWNER for the cost for the specialized services of assisting the OWNER in obtaining letters of map revisions on drainage projects at an hourly rate as per Exhibit "B," as services are rendered, not to exceed \$ N/A. This amount represents the total compensation to the ENGINEER for these services on all phases of the project.

P. Sales and Use Tax Savings: In the event the OWNER and the Contractor determine to utilize a sales and use tax savings agreement in regard to the Project and if a compensation amount is indicated below, the ENGINEER will provide administration and coordination services to OWNER in regard to purchase orders, payments and invoices on the Project as required by the agreement between the OWNER and the Contractor. The ENGINEER shall be compensated for these services at the hourly rate reflected on Exhibit "B," as services are rendered, but not to exceed a maximum of \$ N/A. This amount represents the total compensation to the ENGINEER for these services on all phases of the project.

Q. Generally: The OWNER may elect at its discretion to pay the ENGINEER a portion of the compensation due for any phase of services based upon an invoice of the ENGINEER prior to the completion of that phase or the approval by OWNER of that phase. The OWNER has the right to appeal or ask for clarification on any ENGINEER billing. In the event of termination by the OWNER, the ENGINEER shall be paid a pro rata share for the work deemed by the OWNER to be acceptably performed. This compensation is based upon services being provided in the calendar year 2019.

The ENGINEER shall maintain books and accounts of project related payroll costs, travel, subsistence, field and incidental expenses, in accordance with generally accepted accounting principals and practices. Each of such documents shall indicate to which project or AGREEMENT they are applicable. Such books shall be available during ENGINEER'S normal business hours for the project duration and for a period of one (1) year after completion thereof for an examination by OWNER or OWNER'S representatives to the extent required to verify the costs incurred hereunder. Said books shall be maintained in the ENGINEER'S Tuscaloosa offices.

Approvals by OWNER are for maintainability and usability only, not for adequacy or accuracy of design, Code compliance or other engineering services and shall in no way relieve ENGINEER of full responsibility to provide the full range of competent professional services required herein.

ARTICLE 15 - PERIOD OF SERVICE

The ENGINEER agrees to complete all services required by this AGREEMENT within the following time periods unless otherwise extended in writing by the OWNER. If delay is attributable only to the OWNER, or its officers, agents, and employees, then OWNER will grant ENGINEER a reasonable extension of time to complete any given phase. OWNER will not unreasonably withhold its agreement to extend the time if the circumstances require such, so long as the necessity for such an extension is not attributable in whole or in part to the ENGINEER or any of its subconsultants.

Time as stated herein refers to calendar days. Each phase of service required by this AGREEMENT shall be initiated immediately upon authorization by the OWNER. Time is of the essence.

A. **Completed Preliminary Design.** Where the work includes more than one project, it is anticipated that work by the ENGINEER shall proceed simultaneously on all projects; therefore, the ENGINEER must complete and submit for OWNER'S approval all items required for completed preliminary design and OWNER approval of the projects contained within this AGREEMENT together with the budget level estimates of construction costs, within 60 days from the date of execution of this AGREEMENT.

The OWNER shall then have thirty (30) days to review and comment upon the ENGINEER'S completed draft preliminary design after submission of the same by ENGINEER. (This review will be conducted primarily by the OWNER'S staff and other OWNER representatives).

The ENGINEER shall then promptly but within a maximum of thirty (30) days revise the completed draft preliminary design pursuant to the OWNER'S review and comments. The ENGINEER shall then resubmit the preliminary design to the OWNER and OWNER shall have thirty (30) days to review and obtain OWNER (City Council) approval or comment upon the ENGINEER'S completed preliminary design.

B. **Easement Negotiation, etc.** ENGINEER shall obtain all necessary permits, and assist the OWNER in acquiring deeds, consents, easements, or right-of-way acquisitions for the project simultaneously with final design. In the opinion of the ENGINEER, should condemnation be necessary, he shall promptly so notify OWNER so as not to delay the project.

C. **Final Design.** Where the work includes more than one project, it is anticipated that work by ENGINEER shall proceed simultaneously on all projects, therefore, the ENGINEER must complete and submit all items required in the final design phase including OWNER approval together with estimates of probable construction costs for the projects included within this AGREEMENT within 60 days from the date of approval by OWNER of completed preliminary design. The work shall also be submitted to ADEM and other applicable regulatory agencies at this time, if requested. Plans and specifications shall be available to bidders on that date. Provided; however, this shall not preclude preliminary submittals for the purpose of expediting ADEM or other regulatory agency approvals.

The OWNER shall then have thirty (30) days to review and comment upon the ENGINEER'S final design (including Contract Documents) after submission of the same by ENGINEER. These plans, specifications, and Contract Documents shall be complete, including all detail known necessary by the ENGINEER, and ready to bid, except for modifications resulting from OWNER'S reviews. (This review shall be conducted primarily by the OWNER'S staff and other OWNER representatives). The ENGINEER shall then promptly, but within a maximum of thirty (30) days, revise the final design pursuant to the OWNER'S review and comment. The ENGINEER shall promptly then resubmit ten (10) sets of the completed final Contract Documents to the OWNER and the OWNER shall have thirty (30) days to review and obtain OWNER (City Council) approval or comment upon ENGINEER'S completed final designs. The written approval of the OWNER shall be received prior to placing any advertisement for bids.

NOTE: The date for completion of preliminary or final design on each project (where more than one project is included in this AGREEMENT) shall be concurrent and not consecutive.

Completed preliminary design and final design documents (including Contract Documents) together with estimates of construction costs for each project in this AGREEMENT shall be submitted to the OWNER for approval. However, the review and approval by the OWNER and representatives, employees and agents of the OWNER, including the OWNER'S Program Coordinator, of the preliminary design, and the final design, or any other document including the Contract Documents shall not, in any way, relieve ENGINEER of responsibility or liability for the preliminary design and the final design, including the Contract Documents and other aspects of the work.

D. **Bidding Phase.** The ENGINEER must complete all services in the bidding phase pursuant to the requirements of this AGREEMENT within thirty (30) days of the date of approval by OWNER of completed final design and authorization by the OWNER to bid the project. In the event of a bid protest or similar problem through no fault of the ENGINEER, an appropriate time extension may be granted by the OWNER as provided for herein.

E. **Construction Administration and Services During Construction.** The ENGINEER must complete all services for the construction phase within the time period for the construction contract plus an additional sixty (60) days for the completion of the record drawings. This time period shall commence upon the issuance of a Notice to Proceed from the OWNER to the CONTRACTOR.

F. **Miscellaneous:** Approval of public agencies required for any project shall be obtained by ENGINEER prior to beginning of the succeeding phase. Approvals by OWNER are for maintainability and usability only, not for adequacy or accuracy of design, Code compliance or other engineering services and shall in no way relieve ENGINEER of full responsibility to provide the full range of competent professional services required herein.

G. **Suspension, Delay, or Interruption of Work.** The OWNER may suspend, delay, or interrupt the work of the ENGINEER on the PROJECT for the convenience of the OWNER or for reasons beyond the control of the OWNER or ENGINEER.

In the event such suspension, delay, or interruption of work necessitates an adjustment in the total compensation due the ENGINEER, the ENGINEER shall immediately so inform the OWNER in writing, and an adjustment may be made for any reasonable increases in the cost of the ENGINEER'S performance under this AGREEMENT, including personnel relocation and/or replacement costs and all other identifiable labor and expense costs through an Amendment to this AGREEMENT as herein provided.

Time is of the essence. The ENGINEER shall complete the work for each phase within the timeframe as stated herein. ENGINEER agrees to pay OWNER liquidated damages in the sum of Two Hundred (\$200.00) Dollars per calendar day beyond a specified date that the work on any phase of the project for which the ENGINEER has contracted with the OWNER remains substantially or partially uncompleted attributable in whole or part to the ENGINEER.

ARTICLE 16 - FINAL PAYMENT

Upon satisfactory completion of the construction work on the project, its final inspection by ENGINEER, and final acceptance by the OWNER, the ENGINEER shall be paid any unpaid balance due to the ENGINEER for costs actually incurred under this AGREEMENT and as provided for in this AGREEMENT, provided that the Maximum Cost Limitation(s) is not exceeded. The ENGINEER shall not be paid for costs not incurred. Prior to such final payment under this AGREEMENT, or prior to settlement upon termination or abandonment of this AGREEMENT, and as a condition precedent thereto, the ENGINEER shall promptly deliver to the OWNER all required guaranties and record drawings.

If the OWNER abandons, terminates, delays or postpones the project, as defined herein, the ENGINEER shall deliver to the OWNER copies of all plans, specifications, documents and other work either completed or in progress along with his final statement for services rendered.

ARTICLE 17 – TERMINATION

This AGREEMENT shall be terminated by the OWNER without notice should the project be abandoned, or postponed or delayed for more than a twelve (12) month period. In the event ENGINEER fails to perform to satisfaction of OWNER or OWNER determines that the project should be abandoned, postponed or delayed, this contract may also be terminated by the OWNER for the convenience of the OWNER at the expiration of ten (10) days after written notice to the ENGINEER at any time. If the OWNER determines that the project is to be abandoned, postponed, terminated, or delayed, it shall so notify the ENGINEER in writing and the ENGINEER shall immediately stop all work on the project. The ENGINEER shall be compensated in accordance with Article 3 for services rendered as of the date of notification that the AGREEMENT is to be terminated. No compensation shall be made for lost profit, reassigned personnel, etc.

Should the project as herein agreed be terminated or abandoned, or upon the completion of services or any phase thereof, the ENGINEER shall deliver, unless requested by OWNER to postpone delivery until so requested, ten (10) sets of plans and specifications and other work documents. In addition to its rights pursuant to Article 9 and 10, the OWNER shall be entitled to use these plans and specifications, with or without modification, for the construction of all or part of the entire project. In the event OWNER utilizes incomplete plans, etc., of ENGINEER, it agrees it will not hold ENGINEER liable or responsible thereby.

In the event ENGINEER fails to perform to the satisfaction of OWNER, the OWNER may terminate this AGREEMENT during any phase or at the completion of any phase, and may also contract with another party to complete the project. When this AGREEMENT is terminated, the OWNER shall be under no obligation to pay any amount exceeding the various maximums as set forth herein.

Should the OWNER terminate this AGREEMENT as provided herein, the OWNER shall be under no obligation to pay the ENGINEER for work inadequately performed or not performed.

Loss of Grant Funds. It is understood and agreed by and between the parties that to the extent any of the compensation to ENGINEER is payable by OWNER from the proceeds of a Grant, if the OWNER loses its eligibility to receive or continue to receive Grant funds or for any reasons the OWNER no longer can receive or obtain Grant funds, then the ENGINEER agrees it shall immediately terminate the provision of any services on the Project upon notification from the OWNER of this fact. While the OWNER shall compensate the ENGINEER for services rendered and expenses incurred, it will not be liable to ENGINEER or any of ENGINEER's subconsultants for any services rendered subsequent to the date of notice, nor will the loss of Grant funds and termination of services constitute the basis of any claim whatsoever against OWNER by ENGINEER. ENGINEER agrees to indemnify and hold harmless the OWNER of and from any claim or cause of action arising out of or in any manner associated with termination of services due to a loss of Grant funds from ENGINEER and/or any subconsultant. Provided; however, if the OWNER loses Grant funding due to a failure of ENGINEER or any of ENGINEER's subconsultants failure to perform services, then ENGINEER shall be liable to OWNER and shall refund to OWNER any compensation and expenses paid by OWNER for such services.

ARTICLE 18 - ATTACHMENTS, MISCELLANEOUS CLAUSES, SCHEDULES, AND SIGNATURES

It is further mutually agreed:

ATTACHMENTS

That, the following are attached hereto and adopted herein by reference:

Exhibit A.	Scope of Services
Exhibit B.	Hourly Per Diem Rate Schedule of Charges or Salary Cost

In the event of a direct conflict between any attachment and the terms of this agreement, the latter shall prevail over the former.

Article 19-MISCELLANEOUS CLAUSES

A. Notice and Service Thereof:

1. All notices, demands, requests, change orders, instructions, approvals and claims shall be in writing. Unless expressly otherwise provided elsewhere in this agreement, any election, notice or other communication required or permitted to be given under this agreement shall be in writing and deemed to have been duly given if provided in accordance with the provisions hereof.
2. Any notice to or demand upon either party shall be in writing and shall be sufficiently given if addressed to the parties' representative at the address stated herein and deposited in the United States mail in a sealed envelope with sufficient postage prepaid or delivered with charges prepaid to any telegraph company for transmission to the party.

B. **City Representative:** The City's representative on this project is hereby designated as Wendy Shelby, P.E., Office of the City Engineer, Infrastructure and Public Services and whose address is 2201 University Boulevard, Tuscaloosa, Alabama 35403.

With a copy to: Glenda Webb, City Attorney, Office of the City Attorney, City of Tuscaloosa, Post Office Box 2089, Tuscaloosa, Alabama 35403-2089, Telephone: (205) 248-5140, Facsimile: (205) 349-0328

C. **Contractor Representative:** The ENGINEER's representative on this project is hereby designated as John Calvin Cassady, P.E. and whose address is 4700 Highway 69 North, Northport, Alabama 35473.

D. Capacity: Each party to this agreement represents and warrants to the other as follows:

1. That it is an individual of the age of majority or otherwise a legal entity duly organized and in good standing pursuant to all applicable laws, rules and regulations.
2. That each has full power and capacity to enter into this agreement, to perform and to conclude the same including the capacity, to the extent applicable, to grant, convey and/or transfer, areas, assets, facilities, properties, (both real and personal), permits, consents and authorizations and/or the full power and right to acquire and accept the same.
3. That to the extent required, each party has obtained the necessary approval of its governing body or board and a resolution or other binding act has been duly and properly enacted by such governing body or board authorizing this agreement and said approval has been reduced to writing and certified or attested by the appropriate official of the party.
4. That each party has duly authorized and empowered a representative to execute this agreement on their respective behalf and the execution of this agreement by such representative fully and completely binds the party to the terms and conditions hereof.

5. That absent fraud, the execution of this agreement by a representative of the party shall constitute a certification that all such authorizations for execution exist and have been performed and the other party shall be entitled to rely upon the same. To the extent a party is a partnership, limited liability company or joint venture, the execution of this agreement by any member thereof shall bind the party and to the extent that the execution of agreement is limited to a manager, managing partner or specific member then the person so executing this agreement is duly authorized to act in such capacity for the party.
6. That each party represents and warrants to the other that there is no litigation, claim or administrative action threatened or pending or other proceedings to its knowledge against it which would have an adverse impact upon this transaction or upon either's ability to conclude the transaction or perform pursuant to the terms and conditions of this agreement.
7. That each party has obtained any and all required permits, approvals and/or authorizations from third parties to enable it to fully perform pursuant to this agreement.
8. Under the provisions of the Constitution and laws of the State of Alabama, each party has the power to consummate the transactions contemplated by this agreement;
9. Each party represents and warrants that the execution and delivery of this agreement and the consummation of the transactions contemplated herein will not conflict with, be in violation of, or constitute (upon notice or lapse of time, or both) a default under the laws of the State of Alabama, any resolution, agreement, or other contract agreement, or instrument to which a party is subject, or any resolution, order, rule, regulation, writ, injunction, decree or judgment of any governmental authority or court having jurisdiction over the party.
10. This agreement constitutes the legal, valid and binding obligation of each party and is enforceable against each party in accordance with its terms, except in so far as the enforceability thereof may be limited by:
 - (a) Bankruptcy, insolvency or other similar laws affecting the enforcement of creditors' rights.
 - (b) General principles of equity, regardless of whether such enforceability is considered as a proceeding at equity or at law.
11. Neither party will enter into any agreement to do anything prohibited in this agreement or enter into any agreement or take any action which would in any way impair the ability of the other party to faithfully and fully perform its obligations hereunder
- 12: Under the provisions of the Constitution and laws of the State of Alabama, each party has the power to consummate the transactions contemplated by this agreement;

E. Ownership of Contract Documents: The Contract Documents, and copies of parts thereof, are furnished and owned by the City. All portions of the Contract Documents, and copies of parts thereof, are the instruments of service for this project. They are not to be used on other work and are to be returned to the City on request at the completion of the Project. Any reuse of these materials without specific written verification or adaptation by the City will be at the risk of the user and without liability or legal expense to the City. Such user shall hold the City, its officers, agents and employees harmless from any and all damages, including reasonable attorneys' fees, from any and all claims arising from any such reuse. Any such verification and adoption shall entitle the City to further compensation at rates to be agreed upon by the user and the City.

F. No Waiver of Rights: Neither the inspection, review or approval by the City or any of their officers, employees, agents, nor any order by the City for payment of money, nor any payment for, or acceptance of, the whole or any part of the work by the Engineer, nor any extension of time, nor any possession taken by the City or its employees, or non enforcement of any provision of this agreement by either party shall operate as a waiver of any provision of this agreement, or any power herein reserved to the City, or any right to damages, nor shall any waiver of any breach in this agreement be held to be a waiver of any other or subsequent breach. Acceptance or final payment shall not be final and conclusive with regards to latent defects, fraud, or such gross mistakes as may amount to fraud, or as regards the City's rights under any warranty.

G. Subletting or Assigning of Contract: Limitations: The ENGINEER shall not sublet, assign, transfer, convey, sell or otherwise dispose of any portion of the agreement, his obligations, right, or interest therein, or its power to execute such agreement, to any person, firm or corporation without written consent of the City and such written consent shall not be construed to relieve the ENGINEER of any duty or responsibility for the fulfillment of the agreement. A sale, conveyance or transfer of 50% or more of the stock or ownership of the ENGINEER shall be considered an assignment. Provided; however, in no event shall any portion of this agreement be assigned to an unsuccessful bidder whose bid was rejected because he or she was not a responsible or responsive bidder.

H. Third Party Beneficiaries: It is the intent of the parties hereto that there shall be no third party beneficiaries to this agreement.

I. Final Integration: This Agreement constitutes the entire agreement of the parties, as a complete and final integration thereof with respect to its subject matter. All written or oral understandings and agreements heretofore had between and among the parties are merged into this Agreement, which alone fully and completely expresses their understandings. No representation, warranty, or covenant made by any party which is not contained in this Agreement or expressly referred to herein has been relied on by any party in entering into this Agreement.

J. Force Majeure: Neither party to this Agreement shall hold the other party responsible for damages or delay in performance caused by acts of God, strikes, lockouts or other circumstances beyond the reasonable control of the other or the other party's employees, agents or contractors.

K. Amendment in Writing: This Agreement may not be amended, modified, altered, changed, terminated, or waived in any respect whatsoever, except by a further agreement in writing, properly executed by all of the parties.

L. Binding Effect: This agreement shall bind the parties and their respective personal representatives, heirs, next of kin, legatees, distributees, successors, and assigns.

M. Captions: The captions of this Agreement are for convenience and reference only, are not a part of this Agreement, and in no way define, describe, extend, or limit the scope or intent of this Agreement.

N. Construction: This Agreement shall be construed in its entirety according to its plain meaning and shall not be construed against the party who provided or drafted it.

O. Mandatory and Permissive: "Shall", "will", and "agrees" are mandatory; "may" is permissive.

P. Governing Laws: The laws of the State of Alabama shall govern the validity of this Agreement, the construction of its terms, the interpretation of the rights, the duties of the parties, the enforcement of its terms, and all other matters relating to this Agreement.

Q. Liability of the City or City Officials. Notwithstanding any provision hereof to the contrary, the parties agree and acknowledge that the liability and obligations of the City, City officials or City employees as set forth herein are subject to the limitations imposed on municipalities by the Constitution and laws of the State of Alabama. No present or future official, officer or employee of the City shall ever be personally liable for the performance of any obligations hereunder.

R. Non Discrimination: The ENGINEER agrees that in performing the work and services as required herein under this agreement, not to discriminate against any person on the basis of race color, religion, sex, age or disability. (The ENGINEER shall fully comply with the Americans with Disabilities Act), the Fair Labor Standards Act and all other applicable laws and regulations).

S. Fines and Penalties: The ENGINEER shall be solely liable for any and all fines or penalties which may be levied by any governmental authority against the Owner and/or ENGINEER which are related to the ENGINEER's activities. The Owner shall deduct the amount of the levied fine or penalty from the Contract amount.

T. Agreement Date/Counterparts: The date of this Agreement is intended as and for a date for the convenient identification of this Agreement and is not intended to indicate that this Agreement was necessarily executed and delivered on said date. This instrument may be executed in any number of counterparts, each of which so executed shall be deemed an original, but all such counterparts shall together constitute but one and the same instrument.

U. Use of Words and Phrases. The following words and phrases, where used in this document, shall be given the following and respective interpretations: "Herein," "hereby," "hereunder," "hereof," and other equivalent words refer to this document as an entirety and not solely to the particular portion hereof in which any such word is used.

The definitions set forth in any portion of this Agreement unless the text or context indicates differently shall be deemed applicable whether the words defined are herein used in the singular or the plural. Wherever used herein any pronoun or pronouns shall be deemed to include both singular and plural and to cover all genders.

V. Severability. Each provision of this agreement shall be considered to be severable and, if for any reason, any such provision or any part thereof, is determined to be invalid and contrary to any existing or future applicable law, such invalidity shall not impair the operation of or affect those portions of this agreement that are valid, but this agreement shall be construed and enforced in all respects as if the invalid or unenforceable provision or part thereof had been omitted.

ARTICLE 20. COMPLIANCE WITH IMMIGRATION LAW

By signing this contract, 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, to the extent allowed by Federal law.

ARTICLE 21. COMPLIANCE WITH AFFORDABLE HEALTH CARE ACT.

By signing this contract, the contracting parties affirm, for the duration of the agreement, that they will not violate federal compliance laws pertaining to the Affordable Health Care Act. 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, to the extent allowed by Federal law.

ARTICLE 22. COMPLIANCE WITH ACT 2016-312

By signing this contract, the contracting parties affirm, for the duration of the agreement, that it is not currently engaged in, and will not engage in, the boycott of a person or an entity based in or doing business with a jurisdiction with which this state can enjoy open trade.

IN WITNESS WHEREOF, the parties hereto each herewith subscribe the same in triplicate.

CITY OF TUSCALOOSA, a Municipal Corporation

BY: Walter Maddox
Walter Maddox, Mayor

ATTEST:
Debra K. Clement
Asst. City Clerk.

ENGINEER: The Cassady Company, Inc.

BY: Calvin Cassady

ATTEST:
Kimberly Polifka

STATE OF ALABAMA)
TUSCALOOSA COUNTY)

I, the undersigned authority, a Notary Public in and for said State and County, hereby certify that Walter Maddox, whose name as Mayor of the City of Tuscaloosa, is signed to the foregoing instrument and who is known to me, acknowledged before me on this day that, being informed of the contents of the within instrument, he, as such officer and with full authority, executed the same voluntarily on the day the same bears date.

Given under my hand and official seal this the 24 day of October, 2019.

My Commission Expires: 2/17/21

Stacy Cooper
Notary Public.

STATE OF ALABAMA)
TUSCALOOSA COUNTY)

I the undersigned authority, a Notary Public in and for said State and County, hereby certify that Calvin Cassady who is named as President, is signed to the foregoing agreement, and who is known to me, acknowledged before me on this day that, being informed of the contents of the agreement, he, as such officer and with full authority, executed the same voluntarily for and as an act of said corporation.

Given under my hand and official seal this the 25th day of October, 2019.

My Commission Expires: July 9, 2023



Kimberly Polifka
Notary Public



Providing Solutions for Water, Wastewater, and Storm Water Problems

4700 Highway 69 North • Northport AL 35473

Phone (205) 330-0088 • Fax (205) 330-0089

City of Tuscaloosa

Juanita Drive Improvements - Phase 2

Project No. 2019.012.001

Estimated Engineering and Construction Phase Services Fees

September 19, 2019

The Cassady Company, Inc. Personnel:

- Principal Engineer – John Calvin Cassady, P.E.
- Project Manager – Angela L. Henline, P.E.
- Project Engineer – Brian Green, P.E.

Proposed Subconsultants:

- Design and Construction Testing – Building & Earth Sciences, Inc. (BES)
- Professional Land Surveyor – Kenny Herring, P.L.S. (Synterra, formerly Herring Surveying)

Project Description:

Juanita Drive Improvements Project-Phase 2 is located along the looped portion of Juanita Drive, north of 6th Street East and north of the Initial Phase 1 project. Improvements include roadway widening, sidewalks, storm sewers, water system improvements, and sanitary sewer improvements. This Phase 2 project will be designed similar to and transition from the Initial Phase 1 project. Phase 2 improvements will require City road right-of-way and utility easements.

Estimated Cost of Construction \$ 1,817,208.00

Calculation of Engineering Fees

Total Basic Engineering Fee =	\$ 135,000.00	7.4%
Total Construction Inspection Fee =	\$ 95,780.40	5.3%
Additional Engineering Services =	\$ 80,276.30	
Total Estimated Engineering Fees =	\$ 311,056.70	

Based upon the anticipated construction cost, Engineering Design Services, in accordance with the City's "Standard Engineering Agreement", Article 14, are proposed as follows:

A. Preliminary Design				\$ 50,000.00
B. Final Design				\$ 72,000.00
C. Bid Phase Services				\$ 3,000.00
D. Basic Engineering Services During Construction				\$ 10,000.00
E. Maximum Payment (for Services A-D)				\$ 135,000.00
F. Design Surveying	Rate	Hours	Total	
Professional Land Surveyor (Herring)	\$ 95.00	1.00	\$ 95.00	
Field Survey Crew (Herring)	\$ 125.00	32.00	\$ 4,000.00	
Staff Engineer	\$ 85.00	8.00	\$ 680.00	
CADD Technician (Herring)	\$ 75.00	16.00	\$ 1,200.00	
			Total \$	5,975.00

G. Easements/Plats/Descriptions	Rate	Hours	Total
G1. Stake / Sketch / Description / Preliminary Title Search (estimated 45 properties permanent easements)			
Professional Land Surveyor (Herring)	\$ 95.00	4.00	\$ 380.00
Field Survey Crew (Herring)	\$ 125.00	24.00	\$ 3,000.00
Project Manager	\$ 150.00	1.00	\$ 150.00
Professional Engineer	\$ 130.00	4.00	\$ 520.00
CADD Technician (Herring)	\$ 75.00	40.00	\$ 3,000.00
Prelim Title Search (each)	\$ 50.00	45.00	\$ 2,250.00
		Total \$	9,300.00
G2. Easement Acquisition from Property Owner (First Contact, estimated 45 properties)			
Project Manager	\$ 150.00	8.00	\$ 1,200.00
Professional Engineer	\$ 130.00	45.00	\$ 5,850.00
Clerical/Notary	\$ 85.00	22.50	\$ 1,912.50
		Total \$	8,962.50
H. Advanced Engineering Services During Construction			
H1. Construction Surveying			
Professional Land Surveyor (Herring)	\$ 95.00	8.00	\$ 760.00
Field Survey Crew (Herring)	\$ 125.00	96.00	\$ 12,000.00
Professional Engineer	\$ 130.00	8.00	\$ 1,040.00
Staff Engineer	\$ 85.00	16.00	\$ 1,360.00
CADD Technician (Herring)	\$ 75.00	24.00	\$ 1,800.00
		Total \$	16,960.00
H2. Construction Inspection			
Project Manager	\$ 150.00	16.00	\$ 2,400.00
Professional Engineer	\$ 130.00	80.00	\$ 10,400.00
Eng Tech I (Full-Time)	\$ 85.00	960.00	\$ 81,600.00
Mileage	\$ 0.580	2380.00	\$ 1,380.40
		Total \$	95,780.40
H3. Record Drawings			
Professional Engineer	\$ 130.00	4.00	\$ 520.00
Field Survey Crew (Herring)	\$ 125.00	12.00	\$ 1,500.00
Staff Engineer	\$ 85.00	4.00	\$ 340.00
CADD Technician (Herring)	\$ 75.00	20.00	\$ 1,500.00
		Total \$	3,860.00
I. Design Testing (per BES; soil borings, testings, recommendations report)			\$ 6,400.00
J. Construction Testing (per BES; earthwork and concrete testing)			\$ 14,915.00
K. Administrative/Reimbursable Expenses			\$ 1,500.00
L. Permitting (Storm Water)			
L.1 Storm Water Permit Application (including CBMPP)			
Project Manager	\$ 150.00	2.00	\$ 300.00
Professional Engineer	\$ 130.00	24.00	\$ 3,120.00
Clerical	\$ 85.00	2.00	\$ 170.00
		Total \$	3,590.00
L.2 Storm Water Inspections			
Project Manager	\$ 150.00	1.00	\$ 150.00
Professional Engineer	\$ 130.00	2.00	\$ 260.00
Clerical	\$ 85.00	0.50	\$ 42.50
Mileage	\$ 0.580	30.00	\$ 17.40
		per Inspection \$	469.90
	6 months x 2 inspections/month		12
		Total \$	5,638.80

L.3 Storm Water Permit Closeout				
Project Manager	\$	150.00	1.00	\$ 150.00
Professional Engineer	\$	130.00	8.00	\$ 1,040.00
Clerical	\$	85.00	1.00	\$ 85.00
Total				\$ 1,275.00
M. Prequalification of Bidders				N/A
N. Traffic Control Plan				\$ 2,500.00
O. L.O.M.R.				N/A
P. Sales and Use tax Savings Administration				N/A
TOTAL MAXIMUM CONTRACT FEE				\$ 811,056.70

Time for Completion:

- Time to Complete Preliminary Design = 60 Days
- Time to Complete Final Design = 60 Days
- Easement Acquisition to Follow Approval of Final Design
(estimated 45 Permanent Easements)
- Estimated Construction Contract Time = 180 Days

TOTAL ESTIMATED CONSTRUCTION AND ENGINEERING \$ 2,128,264.70

CITY OF TUSCALOOSA
JUANITA DRIVE IMPROVEMENT PROJECT
IMPROVEMENTS TO JUANITA DRIVE PHASE II



ESTIMATE OF PROBABLE CONSTRUCTION COSTS

8/12/2019

Item	Qty.	Unit	Item Description	Unit Cost	Total Cost
General, Demolition and Earthwork					
1	1.0	LS	Payment and Performance Bonds	\$ 43,000.00	\$ 43,000.00
2	1.0	LS	Mobilization and Demobilization	\$ 85,000.00	\$ 85,000.00
3	30.0	LF	Remove Retaining Wall	\$ 30.00	\$ 900.00
4	1600.0	SY	Remove Concrete Driveway	\$ 15.00	\$ 24,000.00
5	200.0	SY	Remove Concrete Sidewalk	\$ 15.00	\$ 3,000.00
6	345.0	LF	Remove Chain-link Fence	\$ 5.00	\$ 1,725.00
7	65.0	LF	Remove Chain-link Gate	\$ 10.00	\$ 650.00
8	5800.0	CY	Unclassified Excavation / Haul Off Excess	\$ 15.00	\$ 87,000.00
9	38.0	Each	Remove / Reset Mailbox	\$ 300.00	\$ 11,400.00
Base, Pave, and Curb and Gutter Improvements					
10	300.0	SY	Planing Existing Pavement	\$ 8.00	\$ 2,400.00
11	5800.0	SY	Roadbed Processing	\$ 1.00	\$ 5,800.00
12	5800.0	SY	Crushed Aggregate Stone Base, 825B (plant mixed, 6" compacted thickness)	\$ 12.00	\$ 69,600.00
13	45.0	Ton	Improved Bituminous Concrete Binder Layer, Leveling (Thickness Varies)	\$ 110.00	\$ 4,950.00
14	600.0	Ton	Improved Bituminous Concrete Binder Layer (2.0" Compacted Thickness)	\$ 100.00	\$ 60,000.00
15	450.0	Ton	Improved Bituminous Concrete Wearing Surface Layer (1.5" Compacted Thickness)	\$ 100.00	\$ 45,000.00
16	2040.0	SY	Concrete Sidewalk	\$ 70.00	\$ 142,800.00
17	50.0	LF	Concrete Sidewalk Retaining Wall	\$ 70.00	\$ 3,500.00
18	1150.0	SY	Concrete Driveway	\$ 110.00	\$ 126,500.00
19	3300.0	LF	Valley Gutter	\$ 40.00	\$ 132,000.00
20	4.0	Each	Curb Ramps	\$ 2,500.00	\$ 10,000.00
21	1500.0	Ton	Temporary Stone	\$ 50.00	\$ 75,000.00
Storm Sewer Improvements					
22	11.0	Each	S-Inlet (One Wing)	\$ 4,500.00	\$ 49,500.00

CITY OF TUSCALOOSA
JUANITA DRIVE IMPROVEMENT PROJECT
IMPROVEMENTS TO JUANITA DRIVE PHASE II



ESTIMATE OF PROBABLE CONSTRUCTION COSTS

9/12/2019

Item	Qty.	Unit	Item Description	Unit Cost	Total Cost
23	5.0	Each	S-Inlet (Two Wing)	\$ 5,500.00	\$ 27,500.00
24	1.0	Each	Concrete Headwall	\$ 3,500.00	\$ 3,500.00
25	1.0	Each	Connect to Existing Inlet	\$ 1,500.00	\$ 1,500.00
26	232.0	LF	18" Reinforced Concrete Pipe	\$ 90.00	\$ 20,880.00
27	1,072.0	LF	24" Reinforced Concrete Pipe	\$ 100.00	\$ 107,200.00
28	232.0	LF	30" Reinforced Concrete Pipe	\$ 120.00	\$ 27,840.00
29	180.0	Ton	Loose Riprap, Class 2 with Filter Blanket	\$ 60.00	\$ 10,800.00
Utility Relocation					
30	1,700.0	LF	6 Inch Ductile Iron (Class 52) Water Main	\$ 50.00	\$ 85,000.00
31	1.0	LS	B.O.L. Connection to Existing Water Main (Remove Existing 2-Inch Blowoff Assembly and Connect to Existing 6-Inch Gate Valve)	\$ 2,000.00	\$ 2,000.00
31	1.0	LS	E.O.L. Connection to Existing Water Main (Remove Existing 2-Inch Blowoff Assembly and Connect to Existing 6-Inch Gate Valve)	\$ 2,000.00	\$ 2,000.00
32	3.0	Each	6 Inch Gate Valve With Box	\$ 1,100.00	\$ 3,300.00
32	4.0	Each	Fire Hydrant Assembly	\$ 3,500.00	\$ 14,000.00
33	19.0	Each	Reset / Reconnect Existing Water Meter (Long Side)	\$ 750.00	\$ 14,250.00
33	26.0	Each	Reset / Reconnect Existing Water Meter (Short Side)	\$ 450.00	\$ 11,700.00
34	2.0	Each	Remove Existing Gate Valve and Abandon Valve in Place	\$ 500.00	\$ 1,000.00
34	2.0	Each	Cut and Plug Existing 6-Inch Ductile Iron Water Main	\$ 1,000.00	\$ 2,000.00
35	15.0	CY	Cement Mortar Flowable Backfill of Abandoned Water Mains	\$ 450.00	\$ 6,750.00
35	1600.0	LF	8 Inch PVC Pipe SDR 26 Gravity Sewer	\$ 120.00	\$ 192,000.00
36	12.0	Each	Manhole Ring and Cover	\$ 600.00	\$ 7,200.00
36	100.0	V.L.F	4 Foot Diameter Precast Concrete Manhole	\$ 350.00	\$ 35,000.00
37	1350.0	LF	4 Inch Residential Sewer Service Lateral and Required Fittings	\$ 40.00	\$ 54,000.00
37	45.0	Each	4-Inch Sewer Clean Out	\$ 400.00	\$ 18,000.00

CITY OF TUSCALOOSA
JUANITA DRIVE IMPROVEMENT PROJECT
IMPROVEMENTS TO JUANITA DRIVE PHASE II



ESTIMATE OF PROBABLE CONSTRUCTION COSTS

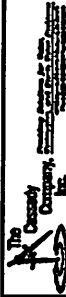
9/12/2019

Item	Qty.	Unit	Item Description	Unit Cost	Total Cost
38	45.0	Each	Residential Sewer Lateral Connection	\$ 750.00	\$ 33,750.00
39	10.0	Each	Magnetic Locators	\$ 30.00	\$ 300.00
40	1.0	LS	Wastewater Flow Control	\$ 15,000.00	\$ 15,000.00
<i>Erosion Control and Site Maintenance</i>					
41	1.0	LS	Erosion Control Management and Maintenance	\$ 25,000.00	\$ 25,000.00
42	1.0	Acre	Temporary Seeding and Mulching	\$ 1,500.00	\$ 1,500.00
43	2000.0	LF	Erosion Control Silt Fence, Type "A"	\$ 4.00	\$ 8,000.00
44	500.0	LF	Sediment Control Logs (20" Diameter)	\$ 8.00	\$ 4,000.00
45	23.0	Ton	Temporary Class 2 Riprap	\$ 80.00	\$ 1,380.00
<i>Traffic Control and Striping</i>					
46	1.0	LS	Traffic Control and Construction Signs	\$ 15,000.00	\$ 15,000.00
47	2.0	Each	Temporary Markings (All Colors)	\$ 90.00	\$ 180.00
48	1.0	LS	Signage	\$ 3,500.00	\$ 3,500.00
49	27.0	LF	2' Stop Bar (Traffic Control Markings, Class 2 Type A)	\$ 14.00	\$ 378.00
<i>Landscaping and Other Improvements</i>					
50	570.0	CY	Topsoil - 4" Thick	\$ 20.00	\$ 11,400.00
51	5100.0	SY	Solid Sodding	\$ 10.00	\$ 51,000.00
52	345.0	LF	Chain-link Fencing	\$ 15.00	\$ 5,175.00
53	65.0	LF	Chain-link Gate	\$ 20.00	\$ 1,300.00
<i>Miscellaneous Items</i>					
54	100.0	LF	6" Under Drain (If required)	\$ 22.00	\$ 2,200.00
55	100.0	CY	Undercut/Backfill using Off-Site Material (If required)	\$ 20.00	\$ 2,000.00
56	100.0	CY	#57 Stone in Trench (If required)	\$ 40.00	\$ 4,000.00
57	1.0	Each	Project Sign	\$ 1,000.00	\$ 1,000.00
TOTAL ESTIMATED CONSTRUCTION COSTS					\$ 1,817,208.00



SCALE

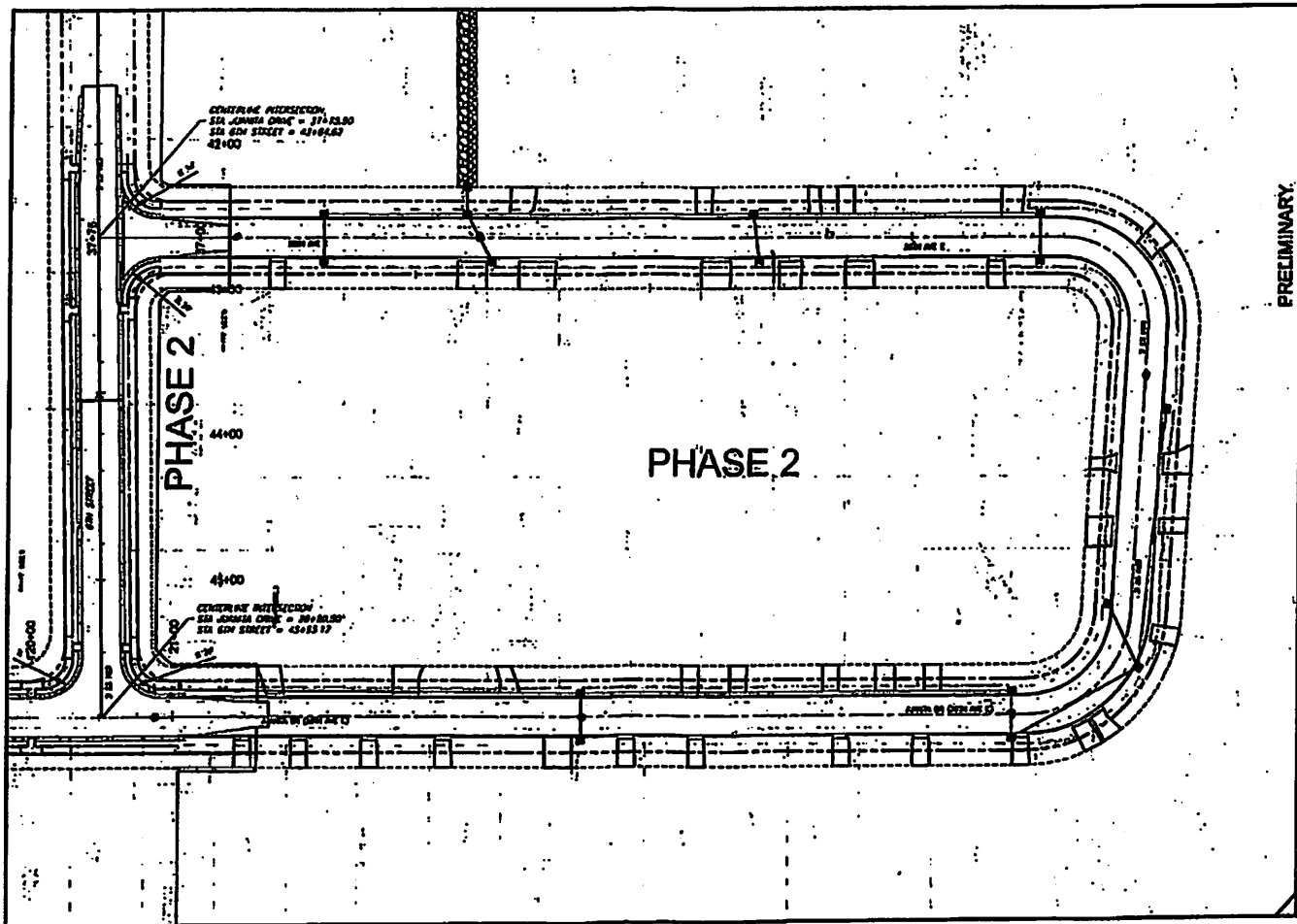
PRELIMINARY



DATE

PROJECT

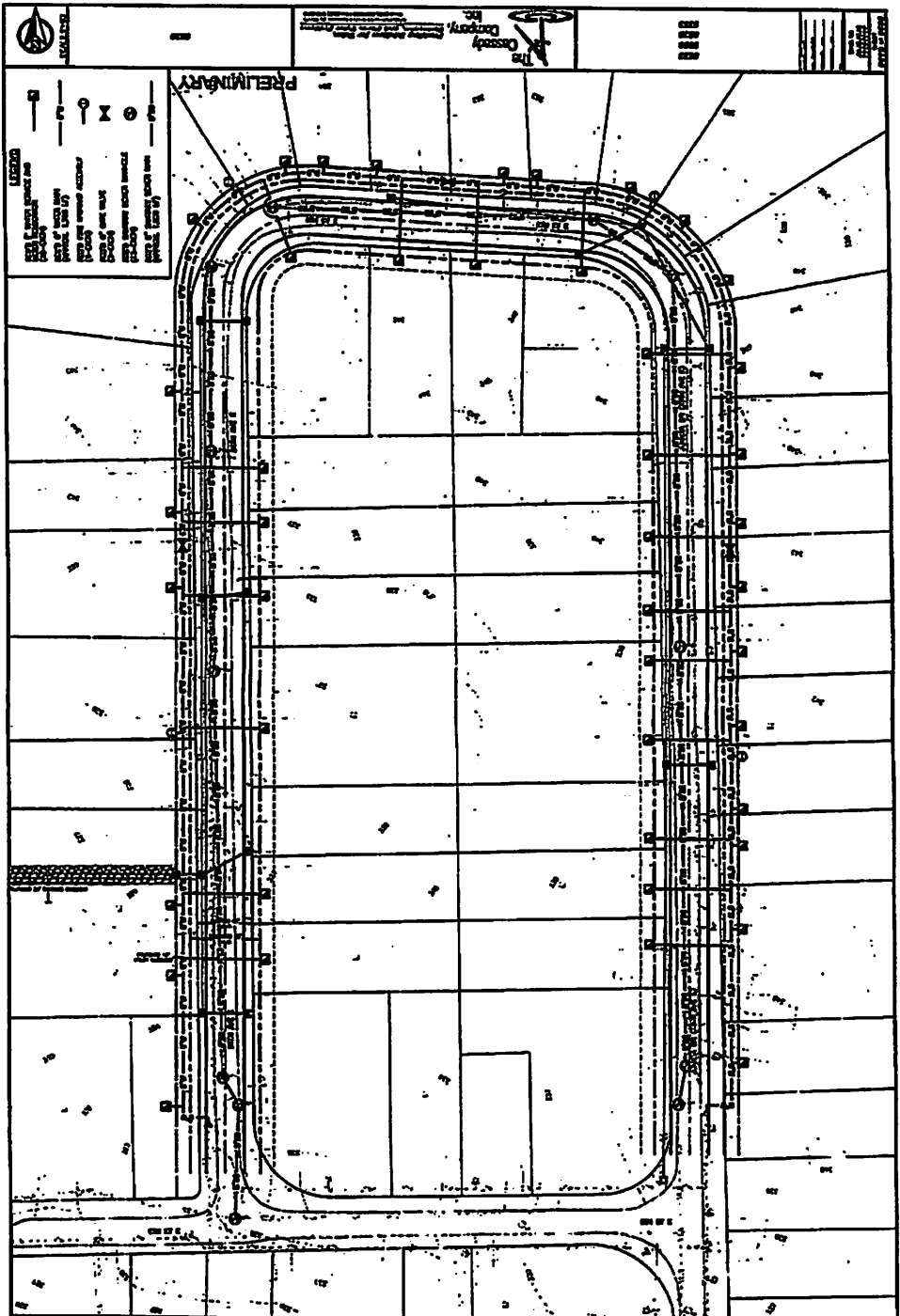
NO. 1000



DATE

PROJECT

NO. 1000



PREPARED BY: [Name]
 CHECKED BY: [Name]
 DATE: [Date]

THE CASSADY COMPANY, INC.

**4700 Highway 69 North
Northport, Alabama 35473
Phone: (205) 330-0098
Fax: (205) 330-0099**

Rate Schedule

Principal Engineer	\$185.00/hour
Project Manager	\$150.00/hour
Professional Engineer I	\$130.00/hour
Staff Engineer	\$85.00/hour
Professional Land Surveyor.....	\$100.00/hour
Field Survey Crew.....	\$135.00/hour
Engineering Technician I	\$70.00/hour
Engineering Technician II.....	\$65.00/hour
Engineering Technician III.....	\$55.00/hour
Office Manager	\$85.00/hour
Clerical.....	\$50.00/hour
Mileage	\$0.58/mile

Fifteen percent (15%) overhead will be added to all sub-consultant fees and miscellaneous expenses.

These rates apply through December 31, 2019.

EXHIBIT "B"