

ENGINEERING SERVICES  
AGREEMENT  
BETWEEN  
CITY OF JONESBORO, ARKANSAS  
AND  
ETC ENGINEERS, INC  
FOR DESIGN AND CONSTRUCTION  
INSPECTION SERVICES  
FOR FLEATING RD. DRAINAGE  
IMPROVEMENTS

This is an agreement made as of \_\_\_\_\_, 20\_\_\_\_  
Between The City of Jonesboro, Arkansas (OWNER)

AND

ETC Engineers, Inc; 1510 So. Broadway Little Rock,  
AR. 72202(ENGINEER)

OWNER intends to:

Remidiate the drainage problems of Flemon Rd. through improvements  
of driveway culverts and channels.

The OWNER and the ENGINEER in consideration of the mutual covenants in this contract agree in respect of the performance of professional engineering services by ENGINEER and in respect of the payment for those services by OWNER as set forth below. Execution of this agreement by the ENGINEER and OWNER constitutes OWNER'S written authorization to ENGINEER to proceed on the date first above written with services described in Section II below.

#### SECTION I - GENERAL

The OWNER agrees to employ the ENGINEER and the ENGINEER agrees to perform professional engineering services for the project. The Engineer has visited the site where the construction will be performed. Engineering will conform to the requirements and standards of the OWNER, and the standards of skill and care ordinarily used by members of the ENGINEER'S profession practicing under similar conditions. In accordance with applicable regulations, laws and procedures. The ENGINEER will coordinate his services with the OWNER, and others required in the accomplishment of the work.

## SECTION II - SCOPE OF SERVICES

The ENGINEER shall render all professional engineering services necessary and customary in the planning and construction of the improvements described above.

Services for each phase of the project are described in more detail as follows for:

### 1. BASIC ENGINEERING SERVICES FOR ME:

#### 1.A DESIGN PHASE:

The ENGINEER shall:

- 1.A.1 Prepare detailed construction drawings, specifications, instructions to bidders, general conditions and special conditions, all based on guides, and design manuals furnished to the ENGINEER by the OWNER. Contract Documents (Plans, Specifications, and Estimates) will be prepared for one (1) construction contract. These designs shall be in accordance with sound engineering principles and shall be submitted to the OWNER for approval. Detailed specifications shall be developed using guide specifications, and contract documents or other appropriate standards approved for use by the OWNER. If required, a specimen copy of the applicable prevailing wage rates will be obtained by the ENGINEER from the Arkansas Department of Labor for incorporation into the specifications for the proposed project.
- 1.A.2 Submit to the OWNER advance copies of the plans and specifications, contract documents and cost estimates for review. The ENGINEER will make any additions to respond to comments by the OWNER, and when the documents have been approved, the ENGINEER will furnish plans to the Owner for bidding and coordination purposes.
- 1.A.3 Since ENGINEER has no control over the cost of labor, materials, equipment or services furnished by others, or over the Contractor(s), methods of determining prices, or over competitive bidding or market conditions, ENGINEER's opinions of probable Total Project Costs and Construction Cost provided for herein are to be made on the basis of ENGINEER's experience and qualifications and represent ENGINEER's best judgment as an experienced and qualified professional engineer, familiar with the construction industry; but ENGINEER cannot and does not guarantee that proposals, bids or actual Total Project or Construction Costs will not vary from opinions of probable cost prepared by ENGINEER.

## 1.B BIDDING OR NEGOTIATING PHASE.

- 1.B.1 Assist OWNER in advertising for and obtaining bids or negotiating proposals for each separate prime contract for construction, materials, equipment and services; dispense plans to prospective bidders, and where applicable, maintain a record of prospective bidders to whom Bidding Documents have been issued, attend pre-bid conferences if required, and receive and process deposits for Bidding Documents.
- 1.B.2 Issue addenda as necessary or appropriate to interpret, clarify or expand the Bidding Documents.
- 1.B.3 Consult with and advise OWNER as to the acceptability of subcontractors, suppliers and other persons and organizations proposed by the prime contractor(s) (herein called "Contractor(s)") for those portions of the work as to which such acceptability is required by the Bidding Documents.
- 1.B.4 Consult with OWNER concerning and determining the acceptability of substitute materials and equipment proposed by Contractor(s) when substitution prior to the award of contracts is allowed by the Bidding Documents.
- 1.B.5 Attend the bid opening, prepare bid tabulation sheets and assist OWNER in evaluating bids or proposals and in assembling and awarding contracts for construction, materials, equipment and services.
- 1.B.6 Assist the OWNER in the execution of all contract documents and furnish a sufficient number of executed documents for the OWNER and the Contractor.
- 1.B.7 Attend and act as the OWNER'S representative at the required pre-construction conference.
- 1.B.8 The duties and responsibilities of ENGINEER during the Bidding or Negotiating Phase are amended and supplemented as indicated in paragraph 3 of Exhibit A "Further Description of Basic Engineering Services and Related Matters".

1.C CONSTRUCTION PHASE:[Subject to approval from the City before construction begins]

The ENGINEER Shall:

- 1.C.1 Perform the duties and discharge the responsibilities stated in Project Specifications after receiving authorization to proceed with construction; however, the ENGINEER does not guarantee the performance of the contract by the Contractor nor assume any duty to supervise safety procedures followed by any Contractor or subcontractor or their respective employees or by any other person at the job site. As a minimum, the Engineer or his qualified representative will visit the site of the work on the average of once during each fifteen (15) working days of the construction period. These visits should be scheduled to coincide with each new phase of construction, scheduled OWNER inspections, and other times when his presence is desirable. The ENGINEER or his qualified representative will be available at all times work is in progress for telephone contact by the construction observer. The Engineer shall direct, advise, and counsel the construction observer in the accomplishment of his duties.
- 1.C.2 Consult with and advise the OWNER during the construction period. He will submit, when requested by the Owner, written reports to the OWNER on the progress of the construction including any problem areas that have developed or are anticipated to develop. In addition, ENGINEER shall supply to OWNER such periodic reports and information as may be required.
- 1.C.3 Applications for Payment are based on ENGINEER's on-site "observations as an experienced and qualified design professional, on information provided by the Resident Project Representative and on review of applications for payment and the accompanying data and schedules.
- 1.C.4 Coordinate with the Resident Project Representative to insure that all material tests required for construction are scheduled and accomplished in a manner that will not delay the Contractor unnecessarily and will meet specification requirements as to location and frequency.

- 1.C.5 Assist the OWNER in the observation" of Contractor's operations for proper classification of workers, and review of Contractor's payrolls.
- 1.C.6 When authorized by the OWNER, prepare change orders for ordering changes in the work from that originally shown on the Plans and Specifications. If re-design or substantial engineering is required in the preparation of these documents, payment for extra services involved will be made in addition to the payment provided in basic engineering services.

2. SPECIAL ENGINEERING SERVICES FOR:

2.A Surveys for Design and Preparation of Plans. The ENGINEER will use his personnel to supplement existing surveys and aerial photography. Surveys will be made of existing facilities necessary for design and for preparation of final plans.

2.B Construction Observation estimated to be: Four (4) months During the normal project construction time

The ENGINEER will maintain Construction Inspectors job for detailed construction observation and coordination of the work. Construction observation will be performed by qualified personnel mutually acceptable to the OWNER and the ENGINEER. The Engineer's Inspector shall endeavor to protect the OWNER against defects and deficiencies in the work of the Contractor, but he does not guarantee the Contractor's performance. The construction observer will prepare requests for monthly and final payments to the Contractor and will provide information for preparation of record drawings of the completed project.

2.C Surveys for Construction. The ENGINEER will use his personnel to perform horizontal and vertical control for the project, which the construction contractor will use to control the work."

### 3. TESTING:

The ENGINEER shall direct the making of sufficient material tests by an approved testing laboratory to permit proper design of the improvements and to demonstrate compliance with specifications during construction. Cost of such necessary testing will be paid by the OWNER directly to the testing laboratory.

### 4. ADDITIONAL SERVICES:

4.A After approval of the preliminary Plans and Specifications, should there be a change in the Scope of Work or a significant change that requires re-design, the ENGINEER will make such changes as directed by the OWNER.

4.B When directed by the OWNER, the ENGINEER will prepare major Change Orders during the construction phase as required to accomplish the work. Major Change Orders are defined as those that require re-design or substantial engineering.

4.C If unanticipated conditions unrelated to a major change in the Scope of Work should arise that extend the Project construction time beyond that established in the Contract Documents, the ENGINEER will maintain resident personnel on the job, as required, to complete the Project. If conditions should arise that extend the Project construction time beyond that established in the Contract Documents, the engineer and the owner shall negotiate a fee for the revised scope of work.

4.D When directed by the OWNER, the ENGINEER will assist as expert witness in litigation arising from the development or construction of the Project.

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SECTION III - *THE OWNER and ENGINEER FURTHER AGREE*

1. This is an Arkansas Contract and in the event of a dispute concerning a question of fact in connection with the provisions of this contract which cannot be disposed of by mutual agreement between the OWNER and ENGINEER, the matter shall be resolved in accordance with the Laws of the State of Arkansas.
  
2. This Agreement may be terminated by either party by seven (7) days written notice in the event of substantial failure *to* perform in accordance with the terms hereof by the one (1) party through no fault *to* the other party. If this Agreement is *so* terminated, the ENGINEER shall be paid for the time and materials expended *to* accomplish the services performed *to* date, as provided in SECTION IV ENGINEERING FEES; however, the ENGINEER may be required *to* furnish an accounting of all costs. If the contract is *so* terminated, the engineer shall be paid for his time at the rate of 2.50 times the actual salary costs paid *to* his employees working on the project, and the actual costs of materials expended.
  
3. After completion of the Project, and prior to final payment, the ENGINEER shall deliver to the OWNER, all original documentation prepared under this Contract, and one (1) set of the record drawing Construction Plans updated *to* reflect changes. Basic survey notes and sketches, charts, computations and other data shall be made available, upon request, to the OWNER without restriction or limitation on their use. In the event the OWNER does not have proper storage facilities for the protection of the original Drawings, the OWNER may request the ENGINEER to retain the Drawings with the provision that they will be made available without restriction upon written request. In the event any of the above documents are reused by the OWNER, the nameplates will be removed and the ENGINEER released and held harmless of subsequent liabilities.

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## SECTION IV - ENGINEERING FEES

For the Basic and Special Engineering Services described above, the engineering fees shall be as tabulated below:

1.

SERVICE	FEE
SURVEYS FOR DESIGN	\$10,000.00
PREPARE FINAL PLANS	\$14,440.00
CONST. CONTRACT ADMINISTRATION	
CONSTRUCTION OBSERVATION	\$10,830.00

2. For the Surveys for Design, Preparation of Preliminary Plans, Preparation of Final Plans, Construction Contract Administration, Surveys for Construction of the project and Construction Observation as tabulated above, the OWNER agrees to pay the ENGINEER the lump sum fee of \$35,270.00. A breakdown of the lump sum fee is included as the Engineering Contract Cost Estimate attached to this Contract. The Engineer will be paid monthly based on percent of project complete to date, based upon statements submitted by the ENGINEER to the OWNER. These statements will be substantiated by a monthly progress report prepared by the ENGINEER, and submitted in the form and number required by the OWNER. Total payment for each part as shown above will be due when that part is acceptably complete to the satisfaction of the OWNER.

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3. For additional services described in SECTION II, paragraph 4, the OWNER and the ENGINEER agree to negotiate the Engineering Fee in accordance with the Scope of Services to be performed.

SECTION VI - SPECIAL PROVISIONS, EXHIBITS and SCHEDULES

6.1 This Agreement is subject to the following special provisions.

6.1.1 Not used

6.2 The following Exhibits are attached to and made a part of this Agreement:

6.2.1 "Engineering Cost Estimate" consisting of 2 pages.

6.3 This Agreement (consisting of pages 1 to 9 inclusive) together with the Exhibits and schedules identified above constitute the entire agreement between OWNER and ENGINEER and supersede all prior written or oral understandings. This Agreement and said Exhibits and schedules may only be amended, supplemented, modified or canceled by a duly executed written instrument.

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

ENGINEER:  
ETC Engineers, Inc

By: 

President

Address for giving notices

Mavor Doug Forman  
City of Jonesboro  
515 W. Washington Ave.  
Jonesboro, Arkansas 72403

Address for giving notices:

Mizan Rahman  
ETC Engineers, Inc.  
1510 So. Broadway  
Little Rock, AR. 72202

**PROJECT DESCRIPTION**

Flemon Rd. Drainage Improvements

**OPTION/ ALTERNATE DESCRIPTIONS**

Alternative 1: Improvements of Driveway Culverts &amp; Channel

Description of Costs	Estimated High	Estimated Low	Estimated Average
Site Preparation	\$10,000.00	\$8,000.00	\$9,000.00
Earth Work	\$43,750.00	\$35,000.00	\$39,375.00
Structure & Culverts	\$116,250.00	\$93,000.00	\$104,625.00
Paving and Base	\$25,000.00	\$20,000.00	\$22,500.00
Others	\$5,000.00	\$5,000.00	\$5,000.00
<b>SUB-TOTAL CONSTRUCTION COSTS</b>			<b>\$180,500.00</b>
Preliminary Engineering			\$3,800.00
Surveying			\$10,000.00
ROW and Easements	4.00%		\$7,220.00
Utility Adjustments	2.00%		\$3,610.00
Permits	3.50%		\$6,317.50
Engineering Design	8.00%		\$14,440.00
Construction Inspection	6.00%		\$10,830.00
Other	12.00%		\$21,660.00
<b>SUB-TOTAL ENG, ROW, UTILITIES ETC</b>			<b>\$77,877.50</b>
<b>TOTAL ESTIMATED COSTS</b>			<b>\$258,377.50</b>

**Notes:**

Estimated rates of construction costs are based on "RS Means Cost Works" for Jonesboro region

Prepared By: ETC ENGINEERS INC

Date: August 01, 2006

Prepared By: ETC ENGINEERS INC  
Date: August 01, 2006

STANDARD FEE SCHEDULE FOR ENGINEERING SERVICES

Project Manager	\$135.00
Senior Engineer	\$105.00
Design Engineer	\$90.00
Senior Technician	\$75.00
Technician/CADD/GIS	\$65.00
Field Survey Party	
Two Man Crew	\$90.00
Three Man Crew	\$95.00
Four Man Crew	\$110.00
GPS	\$135.00
Administrative	\$35.00

Attachment "1 " Engineering Cost Estimate

General Requirements for Plans For Drainage Improvements.

- (1) Plans of drainage locations and widths, rights-of-way required and special treatment, such as open ditch, underground facilities, street crossings and side drainage, to an appropriate scale;
- (2) Topographic- information as related to above, such as existing drainage works, utilities, trees, driveways, drainpipes and culverts with sizes, side ditches, street crossings, property lines, any adjacent facilities, fences and other structures as may be needed for appropriate design;
- (3) Centerline and side profiles of existing drainage and planned centerline profile for the new drainage, to a suitable vertical scale, on same sheets with plans;
- (4) Cross-sections of the proposed drainage improvements.

In accomplishing items 1 through 4 above, the ENGINEER shall:

- (1) Make supplemental field and location surveys and obtain vertical topography as necessary for design, and as necessary for determining to the extent possible from existing utility company (water, gas, power, telephone, wastewater) records and normal field observations, the locations of all utilities where critical to the design or construction of the improvements, and plot locations on plan and profile sheets accurately.
- (2) Perform instrument work in connection with the establishment of permanent markers for horizontal and vertical control, establish such markers and indicate locations and pertinent information therefore on the drawings as may be necessary for the construction contractor to lay out the proposed improvements.
- (3) Upon completion of the Plans, provide the City with a complete set of hydrologic & hydraulic computations, including watershed analysis used to arrive at grades, sizes, and locations of the drainage improvements.