# AGREEMENT FOR ENGINEERING SERVICES MEADOW PARK LAKE WATER AND SEWER SYSTEM IMPROVEMENTS CROSSVILLE, TENNESSEE

THIS AGREEMENT made this \_\_\_\_\_ day of \_\_\_\_\_, 2018, by and between the CITY OF CROSSVILLE, TENNESSEE, hereinafter called the OWNER, and J. R. WAUFORD & COMPANY CONSULTING ENGINEERS, INC., a Tennessee Corporation, hereinafter called the ENGINEER.

WITNESSETH, that the OWNER is desirous of implementing a project to provide increased water and sewer system capacity to the Meadow Park Lake Water Treatment Plant (WTP), and

WITNESSETH, that the OWNER is desirous of employing the ENGINEER to design a new cross country water line and a new low pressure sewer line and pumping station to serve the Meadow Park WTP depicted in the drawing attached to this AGREEMENT as Attachment No. 1 including the preparation of plans and specifications and the preparation of necessary permit applications.

NOW, THEREFORE the OWNER and the ENGINEER agree that for and in consideration of the compensation stipulated herein the ENGINEER agrees to perform the work described hereinafter:

# 1. <u>DESIGN</u>

a. <u>Scope of Work</u>

The Design Phase shall consist of the following:

- (1) Review preliminary routes with the OWNER,
- (2) Conduct a field survey of the water and sewer line routes and sewage pumping station site,
- (3) Prepare draft plans and specifications,
- (4) Conduct coordination meetings with OWNER at the 50 percent and 90 percent draft plans stage regarding constructability and impacts to property owners,
- (5) Submit final plans and specifications to OWNER and the Tennessee Department of Environment and Conservation, Division of Water Supply,
- (6) Submit .pdf and .dwg electronic versions of plans and specifications to OWNER,

- (7) Prepare Storm Water Pollution Prevention Plan (SWPPP) and Aquatic Resources Alteration Permit (ARAP) application if required and submit to the Tennessee Department of Environment and Conservation.
- (8) Prepare and submit applicable permit applications required by the Tennessee Department of Transportation related to utility encroachment.

The ENGINEER shall perform the necessary field surveys (using Tennessee State Plane Coordination System), perform design calculations and prepare the Plans and specifications. The ENGINEER shall consult with the OWNER giving the OWNER the opportunity to comment on the design and to request changes before said design becomes final.

The Plans prepared by the ENGINEER shall be in sufficient detail to permit the actual location of the proposed improvements on the ground. The ENGINEER shall prepare and furnish to the OWNER one .dwg or .dxf electronic version of the final Plans for the OWNER's use in preparing easement drawings and descriptions. Preparation of easement drawings and descriptions, property surveys, property plats, property descriptions, abstracting and negotiations for land rights shall be accomplished by the OWNER.

The Plans furnished by the ENGINEER shall be approvable by the OWNER, the OWNER's Attorney and the Tennessee Department of Environment and Conservation (STATE). Approval by the OWNER and the OWNER'S Attorney shall not be unreasonably withheld.

The ENGINEER shall, with the OWNER's concurrence, make such revisions to the Plans as may be required by the STATE without additional charge.

b. <u>Compensation</u>

The total for the work performed under Paragraph 1. <u>DESIGN</u> is NINETY EIGHT THOUSAND DOLLARS (\$98,000) as described hereinafter.

(1) <u>Preliminary Layout and Field Engineering Survey</u>

The OWNER agrees to pay the ENGINEER the Lump Sum amount of THIRTY FIVE THOUSAND DOLLARS (\$35,000) for the field engineering survey work performed under this paragraph upon presentation of monthly invoices by the ENGINEER.

#### (2) <u>Preparation of Plans and Specifications</u>

The OWNER agrees to pay the ENGINEER the Lump Sum amount of SIXTY THREE THOUSAND DOLLARS (\$63,000) for the preparation of plans and specifications performed under this paragraph upon presentation of monthly invoices by the ENGINEER.

### 2. <u>ADVERTISING AND AWARD</u>

#### a. <u>Scope</u>

The ENGINEER shall assist in the solicitation of bids by providing Specifications to Plan Rooms in Knoxville and Nashville, Tennessee for free and shall provide Specifications to prospective bidders and vendors for approximate cost. The ENGINEER shall answer questions by contractors and vendors, and issue addenda as necessary.

The ENGINEER shall attend the bid opening and tabulate the bid proposals, make an analysis of the bids, and make recommendations for awarding the contract(s) for construction.

#### b. <u>Compensation</u>

The OWNER shall pay the ENGINEER the Lump Sum of SIX THOUSAND DOLLARS (\$6,000) for the work described in this paragraph.

#### 3. ENGINEERING SERVICES DURING CONSTRUCTION

#### a. <u>General Engineering and Resident Observation</u>

The ENGINEER agrees to provide general engineering services during construction including review of Contractor(s)' shop drawings for compliance with specifications, checking Contractor(s)' periodic pay requests, preparing any necessary change orders, making reports to the OWNER relative to the progress and quality of workmanship and attending any necessary conferences.

The ENGINEER agrees to furnish one Resident Project Representative (RPR) for on-the-job observation of the work of the Construction Contractor(s).

The ENGINEER shall endeavor by general observations and by the furnishing of an RPR to guard the OWNER against defects and deficiencies

in the work of the Contractor(s) and to assure the OWNER that the Plans and Specifications are adhered to, but the ENGINEER does not guarantee the performance of the Contractor. The Resident Project Representative's duties are as outlined in Attachment No. 2 of this AGREEMENT.

The ENGINEER will provide the OWNER with one (1) electronic .pdf set and three (3) hard copy sets of prints of record drawings. Such drawings will be based upon construction records of the Resident Project Representative.

### b. <u>Compensation</u>

The OWNER agrees to pay the ENGINEER monthly for work performed under this paragraph upon presentation by the ENGINEER of invoices as outlined in Attachment No. 3 – Standard Charges with a ceiling price not to exceed ONE HUNDRED TWENTY FOUR THOUSAND DOLLARS (\$124,000) based on a construction period of 180 calendar days. The ceiling price for this work shall include hourly rate charges and reimbursables shown in Attachment No. 3. The OWNER and ENGINEER agree to increase said ceiling price if the work schedule of the Contractor requires overtime pay for the Resident Project Representative in accordance with proposed federal regulations.

# 4. EXCLUSIONS

The ENGINEER shall not and will not be considered in charge of or responsible for, acts of the Construction Contractor(s)' methods of construction, construction, construction progress, construction forces or equipment or OSHA safety procedures.

No inclusion or allowance is made for boundary surveys requiring the stamp of a registered land surveyor or acquisition documents.

# 5. <u>OWNER'S RESPONSIBILITIES</u>

The OWNER will furnish "As-Built" plans of its existing facilities for the ENGINEER's use.

The OWNER will furnish access to all lands required for surveying and/or investigative work.

The OWNER will verify the location and/or elevation of its related underground facilities by excavations if it is uncertain of their size and/or location.

The OWNER will furnish liaison with and will be responsible for securing permits, licenses or other approvals from local and State utilities including electric, gas, and telephone.

The OWNER will obtain any special property surveys required for acquisition of sites and/or easements.

The OWNER will pay permit fees and plans review fees charged by regulatory agencies.

### 6. <u>OWNERSHIP OF DOCUMENTS</u>

Plans and Specifications as instruments of service are the property of the ENGINEER whether the work for which they are made be executed or not, and shall not be used on other work except by agreement with the ENGINEER.

# 7. TERMINATION BY OWNER

The OWNER may terminate this AGREEMENT for its convenience upon 30 days written notice to the ENGINEER by the payment to the ENGINEER by the method set forth in Attachment No. 3 for any and all work performed by the ENGINEER for the OWNER up to the date of termination, not to exceed the total lump sum fee for the design.

#### 8. <u>DISPUTE RESOLUTION BY MEDIATION</u>

In an effort to resolve any conflicts that arise during the performance of the work or following the completion thereof, the OWNER and the ENGINEER agree that all disputes between them arising out of or relating to this AGREEMENT or the Project shall be submitted to nonbinding mediation. The mediator shall be selected from a panel of persons having experience with and knowledge of the practice of environmental engineering. The place of mediation shall be as mutually agreed upon by the OWNER and the ENGINEER.

# 9. DESIGNATED REPRESENTATIVES

The services to be performed by the ENGINEER under this AGREEMENT are intended solely for the benefit of the OWNER. Nothing contained herein shall confer any rights upon or create any duties on the part of the ENGINEER toward any person or persons not a party to this AGREEMENT including, but not limited to, any construction contractor, construction subcontractor, material or equipment supplier, or sureties of any of them. The designated representative of the OWNER empowered to receive all correspondence from the ENGINEER and give the ENGINEER instructions within the scope of this AGREEMENT will be:

OWNER: Tim Begley Director of Engineering City of Crossville 392 Main Street Crossville, TN 38555 (931) 456-6172

The designated representative of the ENGINEER empowered to receive all correspondence, instructions and payments from the OWNER and to speak for the ENGINEER within the scope of this AGREEMENT will be:

ENGINEER:	J. Gregory Davenport, P.E. President
	J. R. Wauford & Company
	Consulting Engineers, Inc.
	2835 Lebanon Pike
	P. O. Box 140350
	Nashville, Tennessee 37214
	(615) 883-3243

The OWNER and the ENGINEER each binds itself, its successors, legal representatives, and assigns to the other party to this AGREEMENT, and to its partners, successors, legal representatives and assigns of such other party in respect to all covenants of this AGREEMENT. This shall not be construed so as to prohibit the ENGINEER from employing such specialists as the ENGINEER may deem necessary.

Except as above, neither the OWNER nor the ENGINEER shall assign, sublet or transfer his interest in this AGREEMENT without written consent of the other.

The OWNER and the ENGINEER hereby agree to the full performance of the covenants contained herein.

IN WITNESS WHEREOF they have executed this AGREEMENT, the day and year above written.

### ENGINEER:

J. R. WAUFORD & COMPANY CONSULTING ENGINEERS, INC. OWNER:

CITY OF CROSSVILLE, TENNESSEE

BY:\_\_\_\_\_ J. Gregory Davenport., P.E.

BY:\_\_\_

James Mayberry Mayor

ATTEST:

President

ATTEST:

Robert S. Qualman, P.E. Corporate Secretary

Valerie Hale City Clerk

Attachments:

- Attachment No. 1: Drawing: Proposed Water and Sewer Lines
- Attachment No. 2: Listing of the Duties, Responsibilities and Limitations of Authority of the Resident Project Representative
- Attachment No. 3: Engineer's Standard Charges dated January 1, 2017

# Attachment No. 1



# Attachment No. 2

# <u>A LISTING OF THE DUTIES, RESPONSIBILITIES AND</u> <u>LIMITATIONS OF AUTHORITY OF THE RESIDENT PROJECT REPRESENTATIVE</u>

ENGINEER shall furnish a Resident Project Representative (RPR) to assist ENGINEER in observing performance of the Work of the Contractor.

Through more extensive on-site observations of the Work in progress and field checks of material and equipment by the RPR and assistants, ENGINEER shall endeavor to provide further protection for OWNER against defects and deficiencies in the Work but the furnishing of such services will not make ENGINEER responsible for or give ENGINEER control over construction means, methods, techniques, sequences or procedures, or for safety precautions or programs or responsibility for CONTRACTOR's failure to perform the Work in accordance with the Contract Documents.

The duties and responsibilities of the RPR are limited to those of ENGINEER in ENGINEER's agreement with the OWNER and in the construction Contract Documents, and are further limited and described as follows:

A. General

RPR is ENGINEER's agent at the site, will act as directed by and under the supervision of ENGINEER, and will confer with ENGINEER regarding RPR's actions. RPR's dealings in matters pertaining to the on-site work shall in general be with ENGINEER and CONTRACTOR keeping OWNER advised as necessary. RPR's dealings with subcontractors shall only be through or with the full knowledge and approval of CONTRACTOR. RPR shall generally communicate with OWNER with the knowledge of and under the direction of ENGINEER.

- B. Duties and Responsibilities of RPR
  - 1. Schedule: Review the progress schedule, schedule of Shop Drawings submittals and schedule of values prepared by CONTRACTOR and consult with ENGINEER concerning acceptability.
  - 2. Conferences and Meetings: Attend meetings with CONTRACTOR, such as preconstruction conferences, progress meetings, job conferences and other project-related meetings.
  - 3. Liaison:
    - a. Serve as ENGINEER's liaison with CONTRACTOR, working principally through CONTRACTOR's superintendent and assist in understanding the intent of the Contract Documents; and assist ENGINEER in serving as OWNER's liaison with CONTRACTOR

when CONTRACTOR's operations affect OWNER's on-site operations.

- b. Assist in obtaining from OWNER additional details or information, when required for proper execution of the Work.
- 4. Shop Drawings and Samples:
  - a. Record date of receipt of Shop Drawings and samples.
  - b. Advise ENGINEER and CONTRACTOR of the commencement of any Work requiring a Shop Drawing or sample if the submittal has not been approved by ENGINEER.
- 5. Review of Work, Rejection of Defective Work, Visiting Inspectors and Tests:
  - a. Conduct on-site observations of the Work in progress to assist ENGINEER in determining if the Work is in general proceeding in accordance with the Contract Documents.
  - b. Report to ENGINEER whenever RPR believes that any Work is unsatisfactory, faulty or defective or does not conform to the Contract documents, or has been damaged, or does not meet the requirements of any test or approval required to be made; and advise ENGINEER of Work that RPR believes should be corrected or rejected or should be uncovered for observation, or requires special testing or approval.
  - c. Verify that tests, equipment and system startups and operating and maintenance training are conducted in the presence of appropriate personnel, and that CONTRACTOR maintains adequate records thereof; and observe, record and report to ENGINEER appropriate details relative to the test procedures and startups.
  - d. Accompany visiting inspectors representing public or other agencies having jurisdiction over the Project, record the results of these inspections and report to ENGINEER.
- 6. Interpretation of Contract Documents: Report to ENGINEER when clarifications and interpretations of the Contract Documents are needed and transmit to CONTRACTOR clarifications and interpretations as issued by ENGINEER.
- 7. Modifications: Consider and evaluate CONTRACTOR's suggestions for modifications in Drawings or Specifications and report with RPR's recommendations to ENGINEER. Transmit to CONTRACTOR decisions as issued by ENGINEER.

- 8. Records:
  - a. Maintain orderly files for correspondence, reports of job conferences, Shop Drawings and samples, reproductions of original Contract Documents including all Work Directive Changes, Addenda, Change Orders, Field Orders, additional Drawings issued subsequent to the execution of the Contract, ENGINEER's clarifications and interpretations of the Contract Documents, progress reports, and other Project related documents.
  - b. Keep a diary or log book, recording CONTRACTOR hours on the job site, weather conditions, data relative to questions of Work Directive Changes, Change Orders or changed conditions, list of job site visitors, daily activities, decisions, observations in general, and specific observations in more detail as in the case of observing test procedures; and send copies to ENGINEER.
  - c. Record names, addresses and telephone numbers of all CONTRACTORS, subcontractors and major suppliers of materials and equipment.
- 9. Reports:
  - a. Furnish ENGINEER periodic reports as required of progress of the Work and of CONTRACTOR's compliance with the progress schedule and schedule of Shop Drawing and sample submittals.
  - b. Consult with ENGINEER in advance of scheduled major tests, inspections or start of important phases of Work.
  - c. Report immediately to ENGINEER and OWNER upon the occurrence of any accident.
- 10. Payment Requests: Review applications for payment with CONTRACTOR for compliance with the established procedure for their submission and forward with recommendations to ENGINEER, noting particularly the relationship of the payment requested to the schedule of values, work completed and materials and equipment delivered at the site but not incorporated in the Work.
- 11. Certificates, Maintenance and Operation Materials: During the course of the Work, verify that certificates, maintenance and operation manuals and other data required to be assembled and furnished by CONTRACTOR are applicable to the items actually installed and in accordance with the Contract Documents, and have this material delivered to ENGINEER for review and forwarding to OWNER prior to final payment for the work.

- 12. Completion:
  - a. Before ENGINEER issues a Notice of Substantial Completion, submit to CONTRACTOR a list of observed items requiring completion or correction.
  - b. Conduct final observation in the company of ENGINEER, OWNER and CONTRACTOR and prepare a final list of items to be completed or corrected.
  - c. Observe that all items on final list have been completed or corrected and make recommendations to ENGINEER concerning acceptance.
- C. Limitations of Authority

Resident Project Representative:

- 1. Shall not authorize any deviation from the Contract Documents or substitution of materials or equipment, unless authorized by ENGINEER.
- 2. Shall not exceed limitations of ENGINEER's authority as set forth in the Contract Documents.
- 3. Shall not undertake any of the responsibilities of CONTRACTOR, subcontractors or CONTRACTOR's superintendent.
- 4. Shall not advise on, issue directions relative to or assume control over any aspect of the means, methods, techniques, sequences or procedures of construction unless such advice or directions are specifically required by the Contract Documents.
- 5. Shall not advise on, issue directions regarding or assume control over safety precautions and programs in connection with the Work.
- 6. Shall not accept Shop Drawing or sample submittals from anyone other than CONTRACTOR.
- 7. Shall not authorize OWNER to occupy the Project in whole or in part.
- 8. Shall not participate in specialized field or laboratory tests or inspections conducted by others except as specifically authorized by ENGINEER.



Attachment No. 3

February 4, 2017

# STANDARD CHARGES

(for services performed by our firm on projects not covered by formal contract)

Effective January 1, 2017

Statements will be issued on a monthly basis in accordance with the following method:

Salary Cost Plus a Multiplier

Two times the salary cost of employees for time properly chargeable to the work. Salary cost includes the actual payroll charge plus direct additives which was calculated to be 76.18% for F.Y. ending 12-31-16. Salary cost includes any overtime pay as mandated by the Department of Labor.

**Plus** expenses properly chargeable to the work, as listed below, reimbursable at cost.

# EXPENSES REIMBURSABLE AT COST

- A. Travel by private vehicle at the rate approved by the IRS.
- B. Travel by scheduled airline or charter plane at cost.
- C. Travel and living expenses for all personnel when required to be away from headquarters in connection with the work.
- D. Printing, reproduction, photography, testing laboratories, or special materials in connection with the work.
- E. Mobile phone bills for resident observers and surveyors.
- F. Other consultant fees as approved by client.