City of Fayetteville Staff Review Form

2022-0776

Legistar File ID

9/6/2022

City Council Meeting Date - Agenda Item Only N/A for Non-Agenda Item

Submitted By	Submitted Date Action Recommendat	Division / Department	
,		. ,	_
Tim Nyander	8/18/2022	WASTEWATER TREATMENT (730)	

Staff recommends approval of an Engineering Services Agreement with Garver, LLC in an amount not to exceed \$697,000.00 for Facilities Master Planning Services at the Paul R. Noland Water Resource Recovery Facility (WRRF) and approval of a budget adjustment.

Budget Impact:

5400.730.5800-531	.4.00	Water and Sewer										
Account Number	er	Fund										
02032.1		WWTP Building Improvements										
Project Numbe	r	F	roject Title	2								
Budgeted Item?	nber nber nt? Yes t? Yes	Current Budget	\$	4,139,028.00								
•		Funds Obligated	\$	1,172,662.87								
		Current Balance	\$	2,966,365.13								
Does item have a cost?	Yes	Item Cost	\$	697,000.00								
Budget Adjustment Attached?	Yes	Budget Adjustment	\$	697,000.00								
•		Remaining Budget	\$	2,966,365.13								

Purchase Order Number:	Previous Ordinance or Resolution #	V20210527
Change Order Number:	Approval Date:	
Original Contract Number:		

Comments: RFQ #22-01, Selection #4



CITY COUNCIL MEMO

MEETING OF SEPTEMBER 6, 2022

TO: Mayor and City Council

THRU: Susan Norton, Chief of Staff

Tim Nyander, Utilities Director Water & Sewer Committee

FROM: Corey Granderson, Utilities Engineer

DATE: August 18, 2022

SUBJECT: Engineering Services Agreement with Garver, LLC for the Noland Facilities

Master Plan and approval of a budget adjustment.

RECOMMENDATION:

Staff recommends approval of an Engineering Services Agreement with Garver, LLC in an amount not to exceed **\$697,000.00** for Facilities Master Planning Services at the Paul R. Noland Water Resource Recovery Facility (WRRF) and approval of a budget adjustment.

BACKGROUND:

The City's last Facilities Master Plan for wastewater treatment was performed in 1997 and resulted in the City's construction of the West Side Water Resource Recovery Facility, along with associated sewers to route over half of Fayetteville's wastewater to this new plant. As population continues to increase, it is pertinent to keep long range capacity planning efforts updated so that future capital financing can be considered proactively. This plan will address existing and future capacities of each unit and ancillary process at the Paul R. Noland WRRF.

DISCUSSION:

This Facilities Master Plan will begin with assessment of the wastewater characteristics and loadings arriving at the Noland WRRF. Past data will be analyzed, and additional sampling will be conducted. An in-depth facility tour and inspection will be conducted to look at each individual asset's condition and a risk analysis will be performed. The plant will then be modeled hydraulically, biologically, chemically, and physically and calibrated to match field measurements. This model will be used for technical evaluations of each unit process to develop a 'Gap Analysis' identifying bottlenecks or future constraints of the overall process.

Next, future projects will be graphically laid-out on site plans to ensure high-level feasibility given the existing campus constraints. All of this information will be used to generate an interactive capital planning tool, looking forward 20-years. This plan will identify minor and major projects and recommend implementation schedules for each. All of this information will culminate in a Final Report, approximately 16 months after the issuance of the Notice to Proceed.

The project cost is based on engineering level of effort, hourly by position rates, not to exceed \$697,000.00. Garver was formally selected via RFQ #22-01, Selection #4.

BUDGET/STAFF IMPACT:

Budgeted Funds will be transferred to the WWTP Building Improvements project from the Sanitary Sewer Rehabilitation Project.

Attachments:

Agreement Scope/Fee Budget Adjustment

AGREEMENT For PROFESSIONAL ENGINEERING SERVICES Between CITY OF FAYETTEVILLE, ARKANSAS And GARVER, LLC

THIS AGREEMENT is made as of ________, 2022, by and between City of Fayetteville, Arkansas, acting by and through its Mayor (hereinafter called CITY OF FAYETTEVILLE) and GARVER, LLC (hereinafter called ENGINEER).

CITY OF FAYETTEVILLE from time to time requires professional engineering services in connection with the evaluation, design, and/or construction supervision of capital improvement projects. Therefore, CITY OF FAYETTEVILLE and ENGINEER in consideration of their mutual covenants agree as follows:

ENGINEER shall serve as CITY OF FAYETTEVILLE's professional engineering consultant in those assignments to which this Agreement applies, and shall give consultation and advice to CITY OF FAYETTEVILLE during the performance of ENGINEER's services. All services shall be performed under the direction of a professional engineer registered in the State of Arkansas and qualified in the particular field.

SECTION 1 - AUTHORIZATION OF SERVICES

- 1.1 Services on any assignment shall be undertaken only upon written Authorization of CITY OF FAYETTEVILLE and agreement of ENGINEER
- 1.2 Assignments may include services described hereafter as Basic Services or as Additional Services of ENGINEER.
- 1.3 Changes, modifications or amendments in scope, price or fees to this contract shall **not** be allowed without a formal contract amendment approved by the Mayor and the City Council **in advance** of the change in scope, costs, fees, or delivery schedule.

SECTION 2 - BASIC SERVICES OF ENGINEER

- 2.1 Perform professional services in connection with the Project as hereinafter stated.
- 2.1.1 The Scope of Services to be furnished by ENGINEER during the Project is included in Appendix A attached hereto and made part of this Agreement.
- 2.2 ENGINEER shall coordinate their activities and services with the CITY OF FAYETTEVILLE. ENGINEER and CITY OF FAYETTEVILLE agree that ENGINEER has full responsibility for the engineering services.

SECTION 3 - RESPONSIBILITIES OF CITY OF FAYETTEVILLE

3.1 CITY OF FAYETTEVILLE shall, within a reasonable time, so as not to delay the services of ENGINEER:

- 3.1.1 Provide full information as to CITY OF FAYETTEVILLE's requirements for the Project.
- 3.1.2 Assist ENGINEER by placing at ENGINEER's disposal all available information pertinent to the assignment including previous reports and any other data relative thereto.
- 3.1.3 Assist ENGINEER in obtaining access to property reasonably necessary for ENGINEER to perform his services under this Agreement.
- 3.1.4 Examine all studies, reports, sketches, cost opinions, proposals, and other documents presented by ENGINEER and render in writing decisions pertaining thereto.
- 3.1.5 Provide such professional legal, accounting, financial, and insurance counseling services as may be required for the Project.
- 3.1.6 The City Engineer is the CITY OF FAYETTEVILLE's project representative with respect to the services to be performed under this Agreement. The City Engineer shall have complete authority to transmit instructions, receive information, interpret and define CITY OF FAYETTEVILLE's policies and decisions with respect to materials, equipment, elements and systems to be used in the Project, and other matters pertinent to the services covered by this Agreement.
- 3.1.7 CITY OF FAYETTEVILLE and/or its representative will review all documents and provide written comments to ENGINEER in a timely manner.

SECTION 4 - PERIOD OF SERVICE

- 4.1 This Agreement will become effective upon the first written notice by CITY OF FAYETTEVILLE authorizing services hereunder.
- 4.2 The provisions of this Agreement have been agreed to in anticipation of the orderly progress of the Project through completion of the services stated in the Agreement. ENGINEER will proceed with providing the authorized services immediately upon receipt of written authorization from CITY OF FAYETTEVILLE. Said authorization shall include the scope of the services authorized and the time in which the services are to be completed. The anticipated schedule for this project is included as Appendix A.

SECTION 5 - PAYMENTS TO ENGINEER

- The maximum not-to-exceed amount authorized for this Agreement shall be based upon on an Hourly basis as described in Appendix B.
- 5.2 Statements
- Monthly statements for each calendar month shall be submitted to CITY OF FAYETTEVILLE or such parties as CITY OF FAYETTEVILLE may designate for professional services consistent with ENGINEER'S normal billing schedule. Once established, the billing schedule shall be maintained throughout the duration of the Project.

Applications for payment shall be made in accordance with a format to be developed by ENGINEER and as approved by CITY OF FAYETTEVILLE. Applications for payment

shall be accompanied each month by the updated project schedule as the basis for determining the value earned as the work is accomplished. Final payment for professional services shall be made upon CITY OF FAYETTEVILLE's approval and acceptance with the satisfactory completion of the study and report for the Project.

5.3 Payments

All statements are payable upon receipt and due within thirty (30) days. If a portion of ENGINEER's statement is disputed by CITY OF FAYETTEVILLE, the undisputed portion shall be paid by CITY OF FAYETTEVILLE by the due date. CITY OF FAYETTEVILLE shall advise ENGINEER in writing of the basis for any disputed portion of any statement. CITY OF FAYETTEVILLE will make reasonable effort to pay invoices within 30 days of date the invoice is approved, however, payment within 30 days is not guaranteed.

5.4 Final Payment

Upon satisfactory completion of the work performed under this Agreement, as a condition before final payment under this Agreement, or as a termination settlement under this Agreement, ENGINEER shall execute and deliver to CITY OF FAYETTEVILLE arising under or by virtue of this Agreement, except claims which are specifically exempted by ENGINEER to be set forth therein. Unless otherwise provided in this Agreement or by State law or otherwise expressly agreed to by the parties to this Agreement, final payment under this Agreement or settlement upon termination of this Agreement shall not constitute a waiver of CITY OF FAYETTEVILLE's claims against ENGINEER or his sureties under this Agreement or applicable performance and payment bonds, if any.

SECTION 6 - GENERAL CONSIDERATIONS

6.1 Insurance

During the course of performance of these services, ENGINEER will maintain (in United States Dollars) the following insurance coverages:

<u>Type of Coverage</u> <u>Limits of Liability</u>

Workers' Compensation Statutory

Employers' Liability \$500,000 Each Accident

Commercial General Liability

Bodily Injury and \$1,000,000 Combined Single Limit

Property Damage

Automobile Liability:

Bodily Injury and \$1,000,000 Combined Single Limit

Property Damage

Professional Liability Insurance \$1,000,000 Each Claim

ENGINEER will provide to CITY OF FAYETTEVILLE certificates as evidence of the specified insurance within ten days of the date of this Agreement and upon each renewal of coverage.

- 6.1.2 CITY OF FAYETTEVILLE and ENGINEER waive all rights against each other and their officers, directors, agents, or employees for damage covered by property insurance during and after the completion of ENGINEER's services.
- 6.2 Professional Responsibility
- ENGINEER will exercise reasonable skill, care, and diligence in the performance of ENGINEER's services and will carry out its responsibilities in accordance with customarily accepted professional engineering practices. CITY OF FAYETTEVILLE will promptly report to ENGINEER any defects or suspected defects in ENGINEER's services of which CITY OF FAYETTEVILLE becomes aware, so that ENGINEER can take measures to minimize the consequences of such a defect. CITY OF FAYETTEVILLE retains all remedies to recover for its damages caused by any negligence of ENGINEER.
- 6.3 Cost Opinions and Projections
- 6.3.1 Cost opinions and projections prepared by ENGINEER relating to construction costs and schedules, operation and maintenance costs, equipment characteristics and performance, and operating results are based on ENGINEER's experience, qualifications, and judgment as a design professional. Since ENGINEER has no control over weather, cost and availability of labor, material and equipment, labor productivity, construction Contractors' procedures and methods, unavoidable delays, construction Contractors' methods of determining prices, economic conditions, competitive bidding or market conditions, and other factors affecting such cost opinions or projections, ENGINEER does not guarantee that actual rates, costs, performance, schedules, and related items will not vary from cost opinions and projections prepared by ENGINEER.
- 6.4 Changes
- 6.4.1 CITY OF FAYETTEVILLE shall have the right to make changes within the general scope of ENGINEER's services, with an appropriate change in compensation and schedule only after Fayetteville City Council approval of such proposed changes and, upon execution of a mutually acceptable amendment or change order signed by the Mayor of the CITY OF FAYETTEVILLE and the duly authorized officer of ENGINEER.
- 6.5 Termination
- 6.5.1 This Agreement may be terminated in whole or in part in writing by either party in the event of substantial failure by the other party to fulfill its obligations under this Agreement through no fault of the terminating party, provided that no termination may be effected unless the other party is given:
- Not less than ten (10) calendar days written notice (delivered by certified mail, return receipt requested) of intent to terminate,
- 6.5.1.2 An opportunity for consultation with the terminating party prior to termination.
- 6.5.2 This Agreement may be terminated in whole or in part in writing by CITY OF FAYETTEVILLE for its convenience, provided that ENGINEER is given:

- Not less than ten (10) calendar days written notice (delivered by certified mail, return receipt requested) of intent to terminate, and
- 6.5.2.2 An opportunity for consultation with the terminating party prior to termination.
- 6.5.3 If termination for default is effected by CITY OF FAYETTEVILLE, an equitable adjustment in the price provided for in this Agreement shall be made, but
- No amount shall be allowed for anticipated profit on unperformed services or other work,
- Any payment due to ENGINEER at the time of termination may be adjusted to cover any additional costs to CITY OF FAYETTEVILLE because of ENGINEER's default.
- 6.5.4 If termination for default is effected by ENGINEER, or if termination for convenience is effected by CITY OF FAYETTEVILLE, the equitable adjustment shall include a reasonable profit for services or other work performed. The equitable adjustment for any termination shall provide for payment to ENGINEER for services rendered and expenses incurred prior to the termination, in addition to termination settlement costs reasonably incurred by ENGINEER relating to commitments which had become firm prior to the termination.
- 6.5.5 Upon receipt of a termination action under Paragraphs 6.5.1 or 6.5.2 above, ENGINEER shall:
- 6.5.5.1 Promptly discontinue all affected work (unless the notice directs otherwise),
- 6.5.5.2 Deliver or otherwise make available to CITY OF FAYETTEVILLE all data, drawings, specifications, reports, estimates, summaries and such other information and materials as may have been accumulated by ENGINEER in performing this Agreement, whether completed or in process.
- 6.5.6 Upon termination under Paragraphs 6.5.1 or 6.5.2 above CITY OF FAYETTEVILLE may take over the work and may award another party an agreement to complete the work under this Agreement.
- 6.6 Delays
- In the event the services of ENGINEER are suspended or delayed by CITY OF FAYETTEVILLE or by other events beyond ENGINEER's reasonable control, ENGINEER shall be entitled to additional compensation and time for reasonable costs incurred by ENGINEER in temporarily closing down or delaying the Project.
- 6.7 Rights and Benefits
- 6.7.1 ENGINEER's services will be performed solely for the benefit of CITY OF FAYETTEVILLE and not for the benefit of any other persons or entities.
- 6.8 Dispute Resolution
- 6.8.1 Scope of Paragraph: The procedures of this Paragraph shall apply to any and all disputes between CITY OF FAYETTEVILLE and ENGINEER which arise from, or in any way

are related to, this Agreement, including, but not limited to the interpretation of this Agreement, the enforcement of its terms, any acts, errors, or omissions of CITY OF FAYETTEVILLE or ENGINEER in the performance of this Agreement, and disputes concerning payment.

6.8.2 Exhaustion of Remedies Required: No action may be filed unless the parties first negotiate. If timely Notice is given under Paragraph 6.8.3, but an action is initiated prior to exhaustion of these procedures, such action shall be stayed, upon application by either party to a court of proper jurisdiction, until the procedures in Paragraphs 6.8.3 and 6.8.4 have been complied with.

6.8.3 Notice of Dispute

- 6.8.3.1 For disputes arising prior to the making of final payment promptly after the occurrence of any incident, action, or failure to act upon which a claim is based, the party seeking relief shall serve the other party with a written Notice;
- 6.8.3.2 For disputes arising within one year after the making of final payment, CITY OF FAYETTEVILLE shall give ENGINEER written Notice at the address listed in Paragraph 6.14 within thirty (30) days after occurrence of any incident, accident, or first observance of defect or damage. In both instances, the Notice shall specify the nature and amount of relief sought, the reason relief should be granted, and the appropriate portions of this Agreement that authorize the relief requested.
- Negotiation: Within seven days of receipt of the Notice, the Project Managers for CITY OF FAYETTEVILLE and ENGINEER shall confer in an effort to resolve the dispute. If the dispute cannot be resolved at that level, then, upon written request of either side, the matter shall be referred to the President of ENGINEER and the Mayor of CITY OF FAYETTEVILLE or his designee. These officers shall meet at the Project Site or such other location as is agreed upon within 30 days of the written request to resolve the dispute.
- 6.9 CITY OF FAYETTEVILLE represents that it has sufficient funds or the means of obtaining funds to remit payment to ENGINEER for services rendered by ENGINEER.

6.10 Publications

Recognizing the importance of professional development on the part of ENGINEER's employees and the importance of ENGINEER's public relations, ENGINEER may prepare publications, such as technical papers, articles for periodicals, and press releases, pertaining to ENGINEER's services for the Project. Such publications will be provided to CITY OF FAYETTEVILLE in draft form for CITY OF FAYETTEVILLE's advance review. CITY OF FAYETTEVILLE shall review such drafts promptly and provide CITY OF FAYETTEVILLE's comments to ENGINEER. CITY OF FAYETTEVILLE may require deletion of proprietary data or confidential information from such publications, but otherwise CITY OF FAYETTEVILLE will not unreasonably withhold approval. The cost of ENGINEER's activities pertaining to any such publication shall be for ENGINEER's account.

6.11 Indemnification

6.11.1 CITY OF FAYETTEVILLE agrees that it will require all construction Contractors to indemnify, defend, and hold harmless CITY OF FAYETTEVILLE and ENGINEER from

and against any and all loss where loss is caused or incurred or alleged to be caused or incurred in whole or in part as a result of the negligence or other actionable fault of the Contractors, or their employees, agents, Subcontractors, and Suppliers.

- 6.12 Ownership of Documents
- 6.12.1 All documents provided by CITY OF FAYETTEVILLE including original drawings, disks of CADD drawings and cross sections, estimates, specification field notes, and data are and remain the property of CITY OF FAYETTEVILLE. ENGINEER may retain reproduced copies of drawings and copies of other documents.
- 6.12.2 Engineering documents, drawings, and specifications prepared by ENGINEER as part of the Services shall become the property of CITY OF FAYETTEVILLE when ENGINEER has been compensated for all Services rendered, provided, however, that ENGINEER shall have the unrestricted right to their use. ENGINEER shall, however, retain its rights in its standard drawings details, specifications, databases, computer software, and other proprietary property. Rights to intellectual property developed, utilized, or modified in the performance of the Services shall remain the property of ENGINEER.
- Any files delivered in electronic medium may not work on systems and software different than those with which they were originally produced. ENGINEER makes no warranty as to the compatibility of these files with any other system or software. Because of the potential degradation of electronic medium over time, in the event of a conflict between the sealed original drawings/hard copies and the electronic files, the sealed drawings/hard copies will govern.
- 6.13 Notices
- Any Notice required under this Agreement will be in writing, addressed to the appropriate party at the following addresses:

CITY OF FAYETTEVILLE's address: 125 West Mountain Street Fayetteville, Arkansas 72701

ENGINEER's address: 2049 E. Joyce Blvd, Suite 400 Fayetteville, Arkansas 72703

- 6.14 Successor and Assigns
- 6.14.1 CITY OF FAYETTEVILLE and ENGINEER each binds himself and his successors, executors, administrators, and assigns to the other party of this Agreement and to the successors, executors, administrators, and assigns of such other party, in respect to all covenants of this Agreement; except as above, neither CITY OF FAYETTEVILLE nor ENGINEER shall assign, sublet, or transfer his interest in the Agreement without the written consent of the other.

- 6.15 Controlling Law
- 6.15.1 This Agreement shall be subject to, interpreted and enforced according to the laws of the State of Arkansas without regard to any conflicts of law provisions.
- 6.16 Entire Agreement
- 6.16.1 This Agreement represents the entire Agreement between ENGINEER and CITY OF FAYETTEVILLE relative to the Scope of Services herein. Since terms contained in purchase orders do not generally apply to professional services, in the event CITY OF FAYETTEVILLE issues to ENGINEER a purchase order, no preprinted terms thereon shall become a part of this Agreement. Said purchase order document, whether or not signed by ENGINEER, shall be considered as a document for CITY OF FAYETTEVILLE's internal management of its operations.

SECTION 7 - SPECIAL CONDITIONS

- 7.1 Additional Responsibilities of ENGINEER
- 7.1.1 CITY OF FAYETTEVILLE's review, approval, or acceptance of design drawings, specifications, reports and other services furnished hereunder shall not in any way relieve ENGINEER of responsibility for the technical adequacy of the work. Neither CITY OF FAYETTEVILLE's review, approval or acceptance of, nor payment for any of the services shall be construed as a waiver of any rights under this Agreement or of any cause of action arising out of the performance of this Agreement.
- 7.1.2 ENGINEER shall be and shall remain liable, in accordance with applicable law, for all damages to CITY OF FAYETTEVILLE caused by ENGINEER's negligent performance of any of the services furnished under this Agreement except for errors, omissions or other deficiencies to the extent attributable to CITY OF FAYETTEVILLE or CITY OF FAYETTEVILLE-furnished data.
- 7.1.3 ENGINEER's obligations under this clause are in addition to ENGINEER's other express or implied assurances under this Agreement or State law and in no way diminish any other rights that CITY OF FAYETTEVILLE may have against ENGINEER for faulty materials, equipment, or work.
- 7.2 Remedies
- 7.2.1 Except as may be otherwise provided in this Agreement, all claims, counter-claims, disputes and other matters in question between CITY OF FAYETTEVILLE and ENGINEER arising out of or relating to this Agreement or the breach thereof will be

decided in a court of competent jurisdiction within Arkansas.

- 7.3 Audit: Access to Records
- 7.3.1 ENGINEER shall maintain books, records, documents and other evidence directly pertinent to performance on work under this Agreement in accordance with generally accepted accounting principles and practices consistently applied in effect on the date of execution of this Agreement. ENGINEER shall also maintain the financial information and data used by ENGINEER in the preparation of support of the cost submission required for any negotiated agreement or change order and send to CITY OF

FAYETTEVILLE a copy of the cost summary submitted. CITY OF FAYETTEVILLE, the State or any of their authorized representatives shall have access to all such books, records, documents and other evidence for the purpose of inspection, audit and copying during normal business hours. ENGINEER will provide proper facilities for such access and inspection. Notwithstanding anything to the contrary herein, ENGINEER's proprietary, financial information is not subject to audit.

- 7.3.2 Records under Paragraph 7.3.1 above shall be maintained and made available during performance on assisted work under this Agreement and until three years from the date of final payment for the project. In addition, those records which relate to any controversy arising out of such performance, or to costs or items to which an audit exception has been taken, shall be maintained and made available until three years after the date of resolution of such appeal, litigation, claim or exception.
- 7.3.3 This right of access clause (with respect to financial records) applies to:
- 7.3.3.1 Negotiated prime agreements:
- 7.3.3.2 Negotiated change orders or agreement amendments in excess of \$10,000 affecting the price of any formally advertised, competitively awarded, fixed price agreement:
- 7.3.3.3 Agreements or purchase orders under any agreement other than a formally advertised, competitively awarded, fixed price agreement. However, this right of access does not apply to a prime agreement, lower tier subagreement or purchase order awarded after effective price competition, except:
- 7.3.3.3.1 With respect to record pertaining directly to subagreement performance, excluding any financial records of ENGINEER;
- 7.3.3.3.2 If there is any indication that fraud, gross abuse or corrupt practices may be involved;
- 7.3.3.3.3 If the subagreement is terminated for default or for convenience.
- 7.4 Covenant Against Contingent Fees
- 7.4.1 ENGINEER asserts that no person or selling agency has been employed or retained to solicit or secure this Agreement upon an agreement of understanding for a commission, percentage, brokerage or continent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by ENGINEER for the purpose of securing business. For breach or violation of this assertion, CITY OF FAYETTEVILLE shall have the right to annul this Agreement without liability or at its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.
- 7.5 Gratuities
- 7.5.1 If CITY OF FAYETTEVILLE finds after a notice and hearing that ENGINEER or any of ENGINEER's agents or representatives, offered or gave gratuities (in the form of entertainment, gifts or otherwise) to any official, employee or agent of CITY OF FAYETTEVILLE, in an attempt to secure an agreement or favorable treatment in awarding, amending or making any determinations related to the performance of this Agreement, CITY OF FAYETTEVILLE may, by written notice to ENGINEER terminate

this Agreement. CITY OF FAYETTEVILLE may also pursue other rights and remedies that the law or this Agreement provides. However, the existence of the facts on which CITY OF FAYETTEVILLE bases such finding shall be in issue and may be reviewed in proceedings under the Remedies clause of this Agreement.

- 7.5.2 In the event this Agreement is terminated as provided in Paragraph 7.5.1, CITY OF FAYETTEVILLE may pursue the same remedies against ENGINEER as it could pursue in the event of a breach of the Agreement by ENGINEER As a penalty, in addition to any other damages to which it may be entitled by law, CITY OF FAYETTEVILLE may pursue damages in an amount up to the limits set forth in Section 7.8 below.
- 7.6 Arkansas Freedom of Information Act
- 7.6.1 City contracts and documents, including internal documents and documents of subcontractors and sub-consultants, prepared while performing City contractual work are subject to the Arkansas Freedom of Information Act (FOIA). If a Freedom of Information Act request is presented to the CITY OF FAYETTEVILLE, ENGINEER will do everything possible to provide the documents in a prompt and timely manner as prescribed in the Arkansas Freedom of Information Act (A.C.A. §25-19-101 et seq.). Only legally authorized photocopying costs pursuant to the FOIA may be assessed for this compliance.
- 7.7 Mutual Waiver
- 7.7.1 Notwithstanding anything in this Agreement to the contrary, neither party (including its subconsultants, agents, assignees, affiliates and vendors) shall be liable to the other for any special, consequential, indirect, punitive, exemplary or incidental damages of any kind regardless of the cause or action (including negligence of any kind or character including gross negligence).

IN WITNESS WHEREOF, CITY OF FAYETTEVILLE, ARKANSAS by and through its Mayor, and <u>ENGINEER</u>, by its authorized officer have made and executed this Agreement as of the day and year first above written.

CITY OF FAYETTEVILLE, ARKANSAS	ENGINEER
By:	By:
Mayor, Lioneld Jordan	Water Team Leader, Jerry T. Martin
ATTEST:	The Bit
By:	By:
City Clerk	Senior Project Manager, Chris Buntin

END OF AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES



APPENDIX A - SCOPE OF SERVICES

ENGINEER agrees to perform basic engineering services in connection with the Fayetteville Noland Water Resource Recovery Facility Master Plan (PROJECT) as hereinafter stated, in accordance with the stipulations in this agreement. In general, the scope of work includes master planning efforts for the PROJECT based on a 20-year planning horizon (2022-2043). Population projections will be based on regional planning projections. No flow transfer between the Noland WRRF drainage basin and the Westside WRRF drainage basin will be considered. The work will be focused on the liquid treatment train and the solids handling train up to dewatering. ENGINEER will review and confirm the assumptions used in the 2020 Biosolids Master Plan; however, Biosolids Master Plan update will not be included. ENGINEER shall perform basic engineering services necessary for the development of the PROJECT as follows:

1. TASK 1 – PROJECT MANAGEMENT AND QUALITY ASSURANCE

ENGINEER will manage professional services to complete the PROJECT. These services will include preparation of PROJECT controls including progress reports, action items logs, decision logs, project team meetings, technical review committee workshops, schedule and cash flow projections, and invoicing. ENGINEER shall provide professional services in this Task as follows.

- 1.1. ENGINEER will prepare a PROJECT Work Plan, a document to be used by all participants in the PROJECT to ensure a common understanding of PROJECT goals, scope, and tasks as follows:
 - (a) PROJECT definition
 - (b) PROJECT resources
 - (c) PROJECT schedule
 - (d) PROJECT budget
 - (e) Quality Management Plan
 - (f) Change Management Plan
 - (g) Communications Plan
- 1.2. ENGINEER will plan and participate in a PROJECT start-up meeting with OWNER to confirm PROJECT scope, personnel, lines of communication, security protocols, change management, and schedule.
- 1.3. ENGINEER will conduct a Project Quality Management (PQM) meeting with OWNER. The PQM meeting is a facilitated session where key stakeholders participate in a consensus-building exercise to confirm the PROJECT goals, background (including but not limited to site constraints), and define the critical success factors; the processes, activities, and tasks needed to achieve success of the PROJECT and assign responsibilities for carrying out the tasks. This meeting will be combined with the PROJECT start-up meeting.
- 1.4. ENGINEER will furnish OWNER, when requested, the engineering data and graphics necessary for applications for routine permits, submittals, and approvals required by local, state, and federal authorities, and assist OWNER in consultations with appropriate authorities. ENGINEER will coordinate and meet with applicable regulatory agencies, which may include but are not limited to the Arkansas Department of Environmental Quality (ADEQ).



- 1.5. ENGINEER will develop a schedule for the PROJECT, which will be periodically updated throughout completion of the PROJECT.
- 1.6. ENGINEER will prepare monthly invoices.

2. TASK 2 - WASTEWATER CHARACTERISTICS AND LOADING ASSESSMENT AND HISTORICAL DATA REVIEW

- 2.1. ENGINEER will work with the Owner to develop a baseline average day flow projection range based on population projections for the Noland WRRF service area. In addition, ENGINEER will review the peak flows determined in the *December 2021 Wastewater Master Plan Update*. The ENGINEER will not perform any wastewater flow monitoring.
- 2.2. ENGINEER will develop a sampling protocol memorandum for intermediate process sampling at the facility. Sampling and testing will be conducted by OWNER and results provided to ENGINEER. Required testing, outside the Owner's laboratory capabilities, will be provided by an outside laboratory. The ENGINEER will coordinate and pay for any outside laboratory testing and will invoice the CITY OF FAYETTEVILLE as a direct expense outside the contract amount.
- 2.3. Previous studies and reports will be made available for additional informational purposes only. ENGINEER will research, collect, and review data on the existing system including, but not limited to, the following:
 - (a) Previous master plans, studies, and reports (including considerations for inflow and infiltration for peak flows and peaking factors)
 - (b) Existing plans
 - (c) Performance history for processes
 - (d) Equipment maintenance records and operations and maintenance (O&M) manuals
 - (e) Contractor submittals relevant to areas being rehabilitated
 - (f) Other data and materials
- 2.4. ENGINEER will obtain existing wastewater quality characteristics and wastewater loads from OWNER, including but not limited to the following:
 - (a) Review five years of historical data for carbonaceous biochemical oxygen demand (CBOD), ammonia nitrogen (NH3-N), total phosphorus (T-P), total suspended solids (TSS), effluent dissolved oxygen (DO), fecal coliform bacteria, and pH. This will include all recorded data and sampling locations at the plant. OWNER will furnish the data in Excel format.
 - (b) Review five years of historical industrial flow data for biochemical oxygen demand (BOD), ammonia nitrogen (NH3-N), total phosphorus (T-P), total suspended solids (TSS), and pH. OWNER will furnish the data in Excel format.
 - (c) Document and review non-permit related sampling events.
 - (d) Review and determine concentrations (mg/L) and loads (lbs/day) to be used in projecting wastewater quality.
- 2.5. A technical memorandum (TM), *Historical Data Review*, will be developed by ENGINEER describing historical data review, flow and loadings, and projections. ENGINEER will submit one copy (searchable PDF format) of the draft TM, and after review will provide one final copy (PDF format) of TM to OWNER.



2.6 ENGINEER will conduct a workshop with OWNER to review the findings from the historical data review.

3. TASK 3 – FIELD ASSESSMENTS AND VERIFICATIONS

- 3.1. ENGINEER will meet one time with OWNER to discuss operational considerations, staff requirements, system preferences, and prioritization of PROJECT needs.
- 3.2. ENGINEER will perform an overview walk-through of the facility looking for critical condition items on all features, including the SCADA system. This walk-through will consist of five individuals (project manager, electrical engineer, structural engineer, process engineer, and mechanical engineer). The review team will denote any major visual deficiencies in the facility. The walk-through will include up to one day on site. This walk-through will also include old buildings and treatment units not in service for potential repurposing at the Noland WRRF.
- 3.3. ENGINEER will utilize the Water Research Foundation (WRF) Sustainable Infrastructure Management Program Learning Environment (SIMPLE) Tool to provide rankings of each of the major assets and process trains. Assets will be grouped by type, service, and remaining useful life. The tool will identify the highest risk assets. The risk assessment will be utilized in project prioritization. This tool will only identify risks associated with existing assets at current capacities. Future improvements and capacities are not considered in this risk assessment.
- 3.4. ENGINEER will meet with OWNER staff to document current standard operating procedures for process areas of concern and to document maintenance projects or items that should be included in the CIP that may not have received a critical score based on visual observations and documented issues by staff. The OWNER will provide historical maintenance and work order database information and current/voltage analysis information to the ENGINEER.
- 3.5. A technical memorandum (TM), Asset Condition and Operational Assessment, will be developed by ENGINEER describing the conditions and the criticality rankings of the existing facilities and document any operational issues noted during site visits. ENGINEER will submit one copy (searchable PDF format) of the draft TM, and after review will provide one final copy (PDF format) of TM to OWNER.
- 3.6. ENGINEER will conduct a workshop with OWNER to review the findings from the field assessments.

4. TASK 4 – PLANNING CRITERIA SUMMARY AND MODELING

- 4.1. Complete a regulatory review of the National Pollutant Discharge Elimination System (NPDES) permit criteria as follows:
 - (a) ENGINEER will coordinate with OWNER and ADEQ to identify potential future permit requirements related to the following: pH, effluent toxicity, total phosphorus, ammonia nitrogen, total nitrogen, disinfection, total chlorine residuals, fecal coliform, dissolved oxygen, pretreatment, environmental flows, contaminants of emerging concern, biosolids, chlorides, sulfates, minerals, and other parameters as appropriate.
 - (b) ENGINEER will coordinate with OWNER and ADEQ to identify other potential regulatory requirements that could impact the master planning.
- 4.2. Develop a whole plant hydraulic model for the Noland WRRF.



- (a) Perform field verification of hydraulic structures.
 - (i) Survey of critical top of concrete, invert, and other hydraulic control structure elevations, as required. This effort includes three (3) days of survey time on site.
- (b) Establish model assumptions including data collected from previous and current field assessments.
- (c) Using the model simulate design flow conditions and peak flow conditions to identify existing hydraulic areas of concern.
- (d) Prepare a section in the Planning Criteria Summary and Modeling TM to document hydraulic model assumptions and findings.
- 4.3. Develop plant process model:
 - (a) ENGINEER will utilize a commercial process modeling software to build a complete facility model that will be the basis of subsequent biological technical evaluations.
 - (b) ENGINEER will develop a process model for existing facilities.
 - (c) Document process model assumptions, biological/chemical characteristics criteria used in the models, validation, and calibration using sampling data under previous tasks
 - (d) ENGINEER will model side-stream return flows.
 - (e) ENGINEER will confirm ADEQ design sizing criteria.
- 4.4. A technical memorandum (TM), *Planning Criteria Summary and Modeling*, will be developed by ENGINEER and will include:
 - (a) Loading projections
 - (b) Speculative regulatory requirements
 - (c) Speculative effluent quality requirements
 - (d) Capacity evaluation
 - (e) Plant Process Model
 - (f) Plant Hydraulic Model

ENGINEER will submit one copy (searchable PDF format) of the draft TM, and after review will provide one final copy (PDF format) of TM to OWNER.

4.5. ENGINEER will conduct a planning criteria workshop with OWNER to discuss the *Planning Criteria Summary and Modeling* TM and review the basis of planning criteria and modeling results.

5. TASK 5 – TECHNICAL EVALUATIONS

Based on the completion of Task 2 to Task 4, ENGINEER will begin detailed system evaluations and development of alternatives for the Noland WRRF. The process and hydraulic modeling developed in Task 4 will be utilized for alternatives evaluation. ENGINEER will conduct technical evaluations for the tasks below. The evaluations will include:

- (a) Qualitative advantages and disadvantages
- (b) Potential site location
- (c) Process flow diagram
- (d) Opinion of probable construction costs (OPCC)
 - 1) Estimates will be considered high level planning estimates with an expected range of -30% to +50% of potential construction costs.



- (e) Identification of unintended consequences
- (f) Up to 16 total hours for one person to accompany the OWNER staff on facility site visits to observe evaluated technologies.

ENGINEER will perform the following process evaluations at the Noland WRRF. These evaluations will be based on previously established design criteria for the Noland WRRF.

5.1. Nutrient Management:

- (a) ENGINEER will utilize the process model developed in Task 4 to evaluate process performance of the existing system for treating projected flow and loadings.
- (b) ENGINEER will identify alternatives to accommodate anticipated future nutrient limits. The nutrient removal performance section of the TM will identify two (2) possible configurations to obtain nutrient removal via biological removal through basin configuration of adding zones and tankage or chemical precipitation.
- (c) ENGINEER will develop a cost model for treating the projected loadings including capital costs, O&M costs, and life cycle costs. The deliverable will identify the lowest cost option for achieving these limits.
- (d) ENGINEER will evaluate aeration requirements for biological treatment of projected loadings. ENGINEER will evaluate two (2) alternatives for additional aeration needs: mechanical aeration and diffused aeration. Potential performance capacity impacts, performance improvements, and energy savings will be reviewed.
- (e) ENGINEER will summarize the results in a TM section titled "Nutrient Management".

5.2. Plant Electrical Service and Standby Power Evaluation:

- (a) ENGINEER will review previous reports and projects related to the electrical service and standby power, and document existing system with updates as necessary.
- (b) ENGINEER will review the plant's primary electrical service, standby generation capacity and switchgear, and make recommendations for future expansion(s). The evaluation will include standby generation procedures and identification of options for future load-shedding and/or peak shaving operational strategies that would require additional detailed design.
- (c) ENGINEER will summarize the results in a TM section titled "Electrical Service and Standby Power".

5.3. Instrumentation, Controls, and SCADA Evaluation:

- (a) ENGINEER will assess the existing I/C and SCADA system and identify needs for new or additional controls to optimize major treatment components.
- (b) ENGINEER will document the existing SCADA system and provide a detailed evaluation focusing primarily on plant-wide SCADA system improvements related to process control for the treatment facility.
- (c) ENGINEER will summarize the results in a TM section titled "Instruments, Controls and SCADA".

5.4. Influent Pump Station Wetwell and Hydraulic Capacity Evaluation:

- (a) ENGINEER will evaluate influent pump station wetwells.
- (b) ENGINEER will evaluate the existing pumps maximum pumping capacity.



- (c) ENGINEER will complete an analysis of the existing wetwells operational level to determine if a new pump station is necessary in the future or if larger pumps can be installed to accommodate future peak flows.
- (d) If the remaining useful life of Pump Station 1 is less than the planning horizon, Engineer will evaluate a replacement pump station.
- (e) ENGINEER will make recommendations for improvements.
- (f) ENGINEER will summarize the results in a TM section titled "Pump Stations".

5.5. Headworks Evaluation:

- (a) ENGINEER will evaluate the existing screening facility.
- (b) Engineer will evaluate two (2) overall screening alternatives. The first alternative will include replacement of the existing manual screens by mechanical course screens. The second alternative will consist of an evaluation of up to three (3) fine screening technology to improve screening capture, simplify maintenance, and reduce impact on downstream processes.
- (c) ENGINEER will perform grit removal analysis and recommend enhancements. Perform field sample and determine capture rate at standard grit classification sizes. Coordinate with staff to determine if there are any current adverse effects on downstream processes as a result of grit accumulation. Grit sampling (if required) will be coordinated by ENGINEER and contracted directly with OWNER.
- (d) ENGINEER will make recommendations for improvements.
- (e) ENGINEER will summarize the results in a TM section titled "Headworks".

5.6. Solids Management Evaluation:

- (a) ENGINEER will develop a solids mass balance to size a solids dewatering facility for future solids loads.
- (b) ENGINEER will evaluate sludge storage and mixing requirements for future flow and loading conditions. ENGINEER will provide recommendations for additional sludge storage volume and mixing.
- (c) ENGINEER will evaluate up to three (3) dewatering technologies including Belt Filter Press, Screw Press, and Centrifuge. The comparison of alternatives will be based on a 20-year life cycle cost.
- (d) ENGINEER will develop a layout for a future solids handling train to include dewatering equipment, conveyors, and storage tanks as needed, including alternate locations for solids dewatering.
- (e) ENGINEER will summarize the results in a TM section titled "Solids Management".

5.7. Tertiary Filtration Evaluation:

- (a) ENGINEER will evaluate up to three alternatives for tertiary filtration. Evaluation will consider future phosphorus limits identified in Task 4 (Planning Criteria Summary and Modeling) and be compared based on a 20-year life cycle cost.
- (b) ENGINEER will evaluate enhanced filtration with coagulation/flocculation process prior to filtration, including chemical storage and feed.
- (c) Filtration alternatives, at a minimum, will consider: retrofit of existing sand filters with new technology and new cloth media filter facility. Filter options will be provided to achieve effluent TP concentrations of 0.5 mg/L and 0.1 mg/L, respectively.
- (d) ENGINEER will provide layout for future filtration and flocculation process.
- (e) ENGINEER will summarize the results in a TM section titled "Tertiary Filtration".



5.8. High-Risk Technical Evaluation

(a) ENGINEER will evaluate up to two (2) alternatives for the existing facilities ranked in critical condition based on the findings of the criticality ranking via WRF SIMPLE tool as a part of Task 2.

5.9. Gap Analysis:

- (a) ENGINEER will Identify system deficiencies and problem areas based on the *Planning Criteria Summary and Modeling* TM and results of other technical evaluations. Review, analyze, and evaluate the existing capacity, performance, operating characteristics, and maintenance history.
- (b) ENGINEER will summarize the results in a TM section titled "Gap Analysis".
- 5.10. ENGINEER will develop a *Technical Evaluations* TM describing all technical evaluations. ENGINEER will submit one copy (in bookmarked, searchable PDF format) of the draft TM. After incorporation of OWNER review comments, ENGINEER will provide one final copy (PDF format) of TMs to OWNER.
- 5.11 ENGINEER will conduct up to three Technical Evaluation workshops with OWNER to discuss findings and recommendations of the Technical Evaluations. Each workshop will be assumed to be up to 3 hours.

6. TASK 6 -BUILDOUT FACILITY LAYOUT DEVELOPMENT

- 6.1. Overall Future Expansion Layout Evaluation:
 - (a) Based on results of the *Planning Criteria Summary and Modeling* TM and OWNER accepted technical evaluation recommendations, ENGINEER will provide recommendations for build out of the facility to meet load and flow projections.
 - (b) ENGINEER will review and compile technical evaluation findings and recommendations to identify overlap and mitigate unintended consequences and make corrections as necessary.
 - (c) ENGINEER will develop a recommended process flow diagram combining the recommended alternatives from the Technical Evaluations. ENGINEER will provide recommended site layout for future expansion to buildout (2043), providing one copy in PDF format. Site layout exhibit will include underground facilities as shown on record drawings or by field verification provided by OWNER.
 - (d) ENGINEER will include the recommended demolitions and future site electrical requirements in the future site layout.
- 6.2 ENGINEER will conduct a Full Buildout Plant Layout workshop with OWNER to review plant layout.

7. TASK 7 – CAPITAL IMPROVEMENTS PLANNING

7.1. Capital improvements planning will be based upon OWNER accepted technical evaluation recommendations and accepted full build out master plan. For purposes of this evaluation, detailed CIP planning will be provided for the short term. Projects identified beyond the short-term planning period necessary for the buildout plan will be documented in the Master Plan.



- 7.2. ENGINEER will evaluate the capital improvement needs for the facility and develop a project inventory of all capital improvements proposed for the planning period. ENGINEER will assign project identification numbers and project names to each identified project and document the general scope of work for each.
- 7.3. ENGINEER will assign triggers for each project. The prioritization of projects will be based on these triggers as determined by the decision maker stakeholder committee, which includes ENGINEER as well as others as identified by OWNER.
- 7.4. ENGINEER will develop budget level opinions of probable costs for the capital improvements identified on the project inventory. ENGINEER will coordinate with OWNER on the use of standard cost multipliers in development of the opinions of cost.
- 7.5. ENGINEER will develop O&M budget impacts for each project. A \$10,000 threshold will be considered to categorize expenses paid by contract labor or CITY OF FAYETTEVILLE.
- 7.6. ENGINEER will generate a preliminary prioritization list for the projects.
- 7.7. ENGINEER will develop and provide an interactive tool capable of outlining options for the required capital improvement projects whether, rehabilitation, upgrade, and expansion for the Noland WRRF and associated infrastructure for the planning period. The tool will be capable of being updated/maintained by the OWNER. Up to ten (10) funding scenarios will be considered for the CIP development. The tool will allow the OWNER to make decisions within a dynamic and flexible framework.
- 7.8. ENGINEER will conduct a CIP workshop with OWNER to present the findings.
- 7.9. The priority year for each project listed on the project inventory will be established in the CIP workshop. The priority year represents the scheduling priority of projects to be implemented within the next ten years and for which sources of capital funding must be identified. For projects that are prioritized beyond the short-term planning period, less detailed funding schedules will be developed. ENGINEER will prepare a preliminary capital funding schedule based on the project year designations.
- 7.10. ENGINEER will prepare a *Noland WRRF short term CIP* report, which will be included as a section in the Master Plan document, with a cost-loaded timeline for preliminary engineering, detailed engineering, contract administration, construction, and inspection associated with each major planned project listed on the project inventory. The report shall, at a minimum, include:
 - (a) Stand-alone descriptions of each of the capital improvements.
 - (b) Probable costs that will be presented in terms of 2023 dollars.

8. TASK 8 – MASTER PLAN REPORT

- 8.1. ENGINEER will develop the executive summary, recommendations and conclusions, compile report, table of contents, and appendices for draft report.
- 8.2. ENGINEER will document short term CIP.
- 8.3. ENGINEER will develop and document the implementation schedule.
- 8.4. ENGINEER will provide three hard copies and one electronic PDF of draft report.



- 8.5. ENGINEER will conduct a draft review workshop with OWNER.
- 8.6. ENGINEER will incorporate review comments and complete final report.
- 8.7. ENGINEER will provide three hard copies and an electronic PDF, bookmarked and searchable, of final report.
- 8.8. ENGINEER will present Master Plan recommendations to the OWNER's Water and Sewer Committee. Prior to the presentation, the ENGINEER will provide the draft presentation to the CITY OF FAYETTEVILLE for review and comment.

9. PROJECT DELIVERABLES

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

- (a) Sampling Protocol Memorandum
- (b) Historical Data Review Technical Memorandum.
- (c) Asset Condition and Operational Assessment Technical Memorandum.
- (d) Planning Criteria Summary and Modeling Technical Memorandum.
- (e) Technical Evaluations Technical Memorandums.
 - a. Nutrient Management
 - b. Electrical Service and Standby Power
 - c. Instrument, Controls and SCADA
 - d. Pump Stations
 - e. Headworks
 - f. Solids Management
 - g. Tertiary Filtration
 - h. Gap Analysis
- (f) Full Buildout Plant Layout.
- (g) Master Plan Report.
 - a. Short Term CIP

10. EXTRA WORK

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

- (a) Revisions, due to changed conditions, after OWNER approval and ENGINEER completion of final documents.
- (b) Submittals or deliverables in addition to those listed herein.
- (c) Pilot testing.
- (d) Video inspections and/or pipeline cleaning.
- (e) Wastewater flow monitoring
- (f) Computation Fluid Dynamics (CFD) modeling.
- (g) Environmental Handling and Documentation, including wetlands identification or mitigation plans or other work related to environmentally or historically (culturally) significant items.
- (h) Risk assessments and Emergency Response Plans in accordance with America's Water Infrastructure Act.
- (i) Rate studies.
- (j) Design phase services.
- (k) Bidding and award services.
- (I) Construction phase services.
- (m) Operations and maintenance services.
- (n) Funding support.
- (o) Financial services.



(p) Receiving Stream Modeling.

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

11. SCHEDULE

ENGINEER shall begin work under this agreement within ten (10) days of a Notice to Proceed and shall complete the work in accordance with the schedule below:

Phase Description	Calendar Days
Task 1 – Project Work Plan and Kickoff Meeting	15 days from start date
Task 2 – Wastewater Characteristics and Loading	45 days receipt of data
Task 3 – Field Assessments and Verifications	45 days from Task II review comments
Task 4 – Planning Criteria Summary and Modeling	45 days from Task III review comments
Task 5 – Technical Evaluations	120 days from Task IV review comments
Task 6 – Buildout Plant Layout Development	60 days from Task V review comments
Task 7 – Capital Improvements Planning	45 days from Task VI review comments
Task 8 – Draft Master Plan Report	45 days from Task VII review comments
Task 8 – Final Master Plan Report	30 days from Draft Master Plan review comments



12. PAYMENT

The table below presents a summary of the fee amounts and fee types for this Scope of Services.

WORK DESCRIPTION	FEE AMOUNT	FEE TYPE
TASK 1 - PROJECT MANAGEMENT AND QUALITY ASSURANCE	\$38,200	
TASK 2 – WASTEWATER CHARACTERISTICS AND LOADING ASSESSMENT AND HISTORICAL DATA REVIEW	\$39,400	
TASK 3 – FIELD ASSESSMENTS AND VERIFICATION	\$61,000	
TASK 4 – PLANNING CRITERIA SUMMARY AND MODELING	\$107,100	HOURLY RATE + EXPENSES
TASK 5 – TECHNICAL EVALUATIONS	\$249,600	
TASK 6 – BUILDOUT FACILITY LAYOUT DEVELOPMENT	\$41,600	
TASK 7 – CAPITAL IMPROVEMENTS PLANNING	\$93,200	
TASK 8 – MASTER PLAN REPORT	\$56,900	
LABORATORY TESTING	\$10,000	DIRECT COST REIMBURSMENT
TOTAL FEE	\$697,000	

The CITY OF FAYETTEVILLE will pay the ENGINEER for Service rendered at the agreed upon rates for each classification of ENGINEER's personnel (may include contract staff classified at ENGINEER's discretion) plus reimbursable expenses including but not limited to printing, courier service, reproduction, and travel. The total amount paid to ENGINEER under this Scope of Services is estimated to be \$697,000. The actual total fee may not exceed this estimate. For informational purposes, a breakdown of ENGINEER's estimated cost is included in this Exhibit B with approximate current hourly rates for each employee classification. The agreed upon rates will be increased annually with the first increase effective on or about July 1, 2023. Underruns in any phase may be used to offset overruns in another phase as long as the overall Agreement amount is not exceeded.

Expenses other than salary costs that are directly attributable to performance of our Services will be billed as follows:

- 1. Direct cost for travel, long distance and wireless communications, outside reproduction and presentation material preparation, and mail/courier expenses.
- 2. Direct cost (without any markup) for subcontract/subconsultant fees and permit fees.
- 3. Charges similar to commercial rates for reports, plan sheets, presentation materials, etc.



The CITY OF FAYETTEVILLE will pay ENGINEER on a monthly basis, based upon statements submitted by ENGINEER to the CITY OF FAYETTEVILLE for the scope of services described in this agreement. Payments will be prompt and in full.

Additional Services (Extra Work). For work not described or included herein and for work beyond the total fee amount, a contract amendment will be required.

APPENDIX B

City of Fayetteville, Arkansas Noland WRRF Master Plan

All Tasks

WORK TASK DESCRIPTION	E-7	E-5	E-5	E-4	E-4	E-4	E-3	E-2	E-1	D-1	X-2	S-5	S-4	2-Man Crew (Survey)	GARVER	GARVER	TOTAL
	\$398.00	\$282.00	\$282.00	\$234.00	\$234.00	\$234.00	\$180.00	\$145.00	\$120.00	\$112.00	\$94.00	\$181.00	\$137.00	\$219.00	LABOR	DIRECT EXPENSES	
	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.			
Basic Services Section			-														
1. TASK (1 - Project Management and Quality Assurance)						_									00.700		20.700
1.1 Project Work Plan		4			2 8	8	8 8	4	4						\$3,780	©E00	\$3,780
1.2 and 1.3 Owner Startup Meeting and Project Quality Management 1.4 Owner Data Support		4			8	12	8	8	8	16					\$7,372 \$11,160	\$500 \$1,524	\$7,872 \$12,684
1.5 Schedule and Updates		T			4	8	0		0	10					\$2,808	Ψ1,024	\$2,808
1.6 Monthly Invoices					16	8									\$5,616		\$5,616
Quality Control Review	8	8													\$5,440		\$5,440
															\$0		\$0
Subtotal - TASK (1 - Project Management and Quality Assurance)	8	16	0	0	38	44	24	12	12	16	0	0	0	0	\$36,176	\$2,024	\$38,200
2. TASK (2 - Wastewater Characteristics and Loading Assessment and Historical Data Review)	1							0	40						04.000		04.000
2.1 Flow Projections 2.2 Sampling Protocol						8	2	2	16						\$4,802 \$1,586		\$4,802 \$1,586
2.2 Sampling Protocol 2.3 Previous Data Collection and Review	1				8	4	8	2	8						\$1,586		\$1,586
2.4 Wastewater Characteristics	1					16	16	24	l	† †					\$10,104		\$10,104
2.5 Historical Data TM					4	6	8	16			16				\$7,604		\$7,604
2.6 Historical Data Workshop		4			4	2	2		8						\$3,852	\$514	\$4,366
Quality Control Review	8	8											-		\$5,440		\$5,440
															\$0		\$0
Subtotal - TASK (2 - Wastewater Characteristics and Loading Assessment and Historical Data Review)	8	12	0	0	16	40	40	46	32	0	16	0	0	0	\$38,886	\$514	\$39,400
TASK (3 - Field Assessments and Verifications) 3.1 Operations Meeting		4			4										\$2,064	\$500	\$2,564
3.2 Site Inspections		8	8	8	8	8	8								\$11,568	\$500	\$12,068
3.3 WRF Simple Tool and Risk Assessment			, ,		4	8				1					\$2,808	-	\$2,808
3.4 Maintenance Meeting		4	4	4	4	4	4	8	8						\$7,904	\$500	\$8,404
3.5 Asset Condition and Operational Assessment TM			16	16	2	8	8				16				\$13,540		\$13,540
3.6 Asset Condition and Operational Assessment Workshop		4	4	4	4	12	12	12	32						\$14,676	\$540	\$15,216
Quality Control Review	8	8							8						\$6,400		\$6,400
Subtotal - TASK (3 - Field Assessments and Verifications)	8	28	32	32	26	40	32	20	48	0	16	0	0	0	\$0 \$58,960	\$2,040	\$0 \$61,000
4. TASK (4 - Planning Criteria Summary and Modeling)	•	20	32	32	20	40	32	20	40		10	U	U	U	\$50,560	\$2,040	\$61,000
4.1 Regulatory Review and Coordination					8	8	16	12	40						\$13,164	\$500	\$13,664
4.2 Hydraulic Model					-	16	16	40	40						\$17,224	,,,,,	\$17,224
4.2.a Survey Hydraulic Control Points					2		8		8			2	8	30	\$10,896	\$500	\$11,396
4.3 Process Model					8	40	40	80							\$30,032		\$30,032
4.4 Planning Criteria Summary and Modeling TM					6	20	16	24	24		16				\$16,828		\$16,828
4.5 Planning Criteria Summary and Modeling Workshop	40	4			4	6	12		8						\$6,588	\$488	\$7,076
Quality Control Review	16	16								 					\$10,880 \$0		\$10,880 \$0
Subtotal - TASK (4 - Planning Criteria Summary and Modeling)	16	20	0	0	28	90	108	156	120	0	16	2	8	30	\$105,612	\$1,488	\$107,100
5. TASK (5 - Technical Evaluations)			-	-								_			¥ 100,012	71,100	V ,
5.0 Technology Site Visits		16													\$4,512	\$500	\$5,012
The state of the s						24	40	60	16				-		\$23,436		\$23,436
5.1 Nutrient Management						2-7						1 7			\$22,854		\$22,854
5.1 Nutrient Management 5.2 Electrical Service and Standby Power (including load shedding and or peak shaving)				36		2-7	16	30	60	ļ — I				_			
5.1 Nutrient Management 5.2 Electrical Service and Standby Power (including load shedding and or peak shaving) 5.3 Instrumentation, Controls, and SCADA				36 24			8	30	60						\$18,606		\$18,606
5.1 Nutrient Management 5.2 Electrical Service and Standby Power (including load shedding and or peak shaving) 5.3 Instrumentation, Controls, and SCADA 5.4 Influent Pump Station						8	8 16	30 30	60 60						\$18,606 \$16,302		\$16,302
5.1 Nutrient Management 5.2 Electrical Service and Standby Power (including load shedding and or peak shaving) 5.3 Instrumentation, Controls, and SCADA 5.4 Influent Pump Station 5.5 Headworks							8 16 12	30 30 30	60 60 60						\$18,606 \$16,302 \$15,582		\$16,302 \$15,582
5.1 Nutrient Management 5.2 Electrical Service and Standby Power (including load shedding and or peak shaving) 5.3 Instrumentation, Controls, and SCADA 5.4 Influent Pump Station 5.5 Headworks 5.6 Solids Management						8 8	8 16	30 30	60 60						\$18,606 \$16,302		\$16,302
5.1 Nutrient Management 5.2 Electrical Service and Standby Power (including load shedding and or peak shaving) 5.3 Instrumentation, Controls, and SCADA 5.4 Influent Pump Station 5.5 Headworks			8			8 8 8	8 16 12 16	30 30 30 24	60 60 60 40						\$18,606 \$16,302 \$15,582 \$13,032		\$16,302 \$15,582 \$13,032 \$17,556 \$24,808
5.1 Nutrient Management 5.2 Electrical Service and Standby Power (including load shedding and or peak shaving) 5.3 Instrumentation, Controls, and SCADA 5.4 Influent Pump Station 5.5 Headworks 5.6 Solids Management 5.7 Tertiary Filter Evaluation 5.8 High-Risk 5.9 Gap Analysis			4	24 8 4		8 8 8 24 20 24	8 16 12 16 30 30 30	30 30 30 24 12 40 30	60 60 60 40 40 40 40						\$18,606 \$16,302 \$15,582 \$13,032 \$17,556 \$24,808 \$22,230		\$16,302 \$15,582 \$13,032 \$17,556 \$24,808 \$22,230
5.1 Nutrient Management 5.2 Electrical Service and Standby Power (including load shedding and or peak shaving) 5.3 Instrumentation, Controls, and SCADA 5.4 Influent Pump Station 5.5 Headworks 5.6 Solids Management 5.7 Tertiary Filter Evaluation 5.8 High-Risk 5.9 Gap Analysis 5.10 Technical Evaluations TM's				8 4 8	12	8 8 8 24 20 24 16	8 16 12 16 30 30 30 30 30	30 30 30 24 12 40	60 60 60 40 40 40 40 40		60				\$18,606 \$16,302 \$15,582 \$13,032 \$17,556 \$24,808 \$22,230 \$30,870		\$16,302 \$15,582 \$13,032 \$17,556 \$24,808 \$22,230 \$30,870
5.1 Nutrient Management 5.2 Electrical Service and Standby Power (including load shedding and or peak shaving) 5.3 Instrumentation, Controls, and SCADA 5.4 Influent Pump Station 5.5 Headworks 5.6 Solids Management 5.7 Tertiary Filter Evaluation 5.8 High-Risk 5.9 Gap Analysis 5.10 Technical Evaluations TM's 5.11 Technical Evaluations Workshops, up to 3		12	4	24 8 4	12 12	8 8 8 24 20 24	8 16 12 16 30 30 30	30 30 30 24 12 40 30	60 60 60 40 40 40 40		60				\$18,606 \$16,302 \$15,582 \$13,032 \$17,556 \$24,808 \$22,230 \$30,870 \$19,944	\$1,440	\$16,302 \$15,582 \$13,032 \$17,556 \$24,808 \$22,230 \$30,870 \$21,384
5.1 Nutrient Management 5.2 Electrical Service and Standby Power (including load shedding and or peak shaving) 5.3 Instrumentation, Controls, and SCADA 5.4 Influent Pump Station 5.5 Headworks 5.6 Solids Management 5.7 Tertiary Filter Evaluation 5.8 High-Risk 5.9 Gap Analysis 5.10 Technical Evaluations TM's	24	12 24	4	8 4 8		8 8 8 24 20 24 16	8 16 12 16 30 30 30 30 30	30 30 30 24 12 40 30	60 60 60 40 40 40 40 40		60				\$18,606 \$16,302 \$15,582 \$13,032 \$17,556 \$24,808 \$22,230 \$30,870 \$19,944 \$16,320	\$1,440	\$16,302 \$15,582 \$13,032 \$17,556 \$24,808 \$22,230 \$30,870 \$21,384 \$16,320
5.1 Nutrient Management 5.2 Electrical Service and Standby Power (including load shedding and or peak shaving) 5.3 Instrumentation, Controls, and SCADA 5.4 Influent Pump Station 5.5 Headworks 5.6 Solids Management 5.7 Tertiary Filter Evaluation 5.8 High-Risk 5.9 Gap Analysis 5.10 Technical Evaluations TM's 5.11 Technical Evaluations Workshops, up to 3		24	4 8	8 4 8 4	12	8 8 8 24 20 24 16 24	8 16 12 16 30 30 30 30 30 24	30 30 30 24 12 40 30 30	60 60 60 40 40 40 40 40 24	0		0	0	0	\$18,606 \$16,302 \$15,582 \$13,032 \$17,556 \$24,808 \$22,230 \$30,870 \$19,944 \$16,320 \$0		\$16,302 \$15,582 \$13,032 \$17,556 \$24,808 \$22,230 \$30,870 \$21,384 \$16,320
5.1 Nutrient Management 5.2 Electrical Service and Standby Power (including load shedding and or peak shaving) 5.3 Instrumentation, Controls, and SCADA 5.4 Influent Pump Station 5.5 Headworks 5.6 Solids Management 5.7 Tertiary Filter Evaluation 5.8 High-Risk 5.9 Gap Analysis 5.10 Technical Evaluations TM's 5.11 Technical Evaluations Workshops, up to 3 Quality Control Review	24		4	8 4 8		8 8 8 24 20 24 16	8 16 12 16 30 30 30 30 30	30 30 30 24 12 40 30	60 60 60 40 40 40 40 40	0	60	0	0	0	\$18,606 \$16,302 \$15,582 \$13,032 \$17,556 \$24,808 \$22,230 \$30,870 \$19,944 \$16,320	\$1,440	\$16,302 \$15,582 \$13,032 \$17,556 \$24,808 \$22,230 \$30,870 \$21,384 \$16,320
5.1 Nutrient Management 5.2 Electrical Service and Standby Power (including load shedding and or peak shaving) 5.3 Instrumentation, Controls, and SCADA 5.4 Influent Pump Station 5.5 Headworks 5.6 Solids Management 5.7 Tertiary Filter Evaluation 5.8 High-Risk 5.9 Gap Analysis 5.10 Technical Evaluations TM's 5.11 Technical Evaluations Workshops, up to 3 Quality Control Review Subtotal - TASK (5 - Technical Evaluations)		24	4 8	8 4 8 4	12	8 8 8 24 20 24 16 24	8 16 12 16 30 30 30 30 30 24	30 30 30 24 12 40 30 30	60 60 60 40 40 40 40 40 24	0		0	0	0	\$18,606 \$16,302 \$15,582 \$13,032 \$17,556 \$24,808 \$22,230 \$30,870 \$19,944 \$16,320 \$0 \$246,052		\$16,302 \$15,582 \$13,032 \$17,556 \$24,808 \$22,230 \$30,870 \$21,384 \$16,320
5.1 Nutrient Management 5.2 Electrical Service and Standby Power (including load shedding and or peak shaving) 5.3 Instrumentation, Controls, and SCADA 5.4 Influent Pump Station 5.5 Headworks 5.6 Solids Management 5.7 Tertiary Filter Evaluation 5.8 High-Risk 5.9 Gap Analysis 5.10 Technical Evaluations TM's 5.11 Technical Evaluations Workshops, up to 3 Quality Control Review Subtotal - TASK (5 - Technical Evaluations) 6. TASK (6 - Buildout Facility Layout Development)		24 52	4 8	8 4 8 4	12 24	8 8 8 24 20 24 16 24	8 16 12 16 30 30 30 30 24	30 30 30 24 12 40 30 30 30	60 60 60 40 40 40 40 40 24			0	0	0	\$18,606 \$16,302 \$15,582 \$13,032 \$17,556 \$24,808 \$22,230 \$30,870 \$19,944 \$16,320 \$0 \$246,052		\$16,302 \$15,582 \$13,032 \$17,556 \$24,808 \$22,230 \$30,870 \$21,384 \$16,320 \$0 \$249,600
5.1 Nutrient Management 5.2 Electrical Service and Standby Power (including load shedding and or peak shaving) 5.3 Instrumentation, Controls, and SCADA 5.4 Influent Pump Station 5.5 Headworks 5.6 Solids Management 5.7 Tertiary Filter Evaluation 5.8 High-Risk 5.9 Gap Analysis 5.10 Technical Evaluations TM's 5.11 Technical Evaluations Workshops, up to 3 Quality Control Review Subtotal - TASK (5 - Technical Evaluations) 6. TASK (6 - Buildout Facility Layout Development) 6.1 Future Expansion Layout and PFD and Utilities		52 4	4 8	8 4 8 4	12 24 4	8 8 8 24 20 24 16 24	8 16 12 16 30 30 30 30 24 252	30 30 30 24 12 40 30 30 30	60 60 60 40 40 40 40 40 24			0	0	0	\$18,606 \$16,302 \$15,582 \$13,032 \$17,556 \$24,808 \$22,230 \$30,870 \$19,944 \$16,320 \$0 \$246,052	\$3,548	\$16,302 \$15,582 \$13,032 \$17,556 \$24,808 \$22,230 \$30,870 \$21,384 \$16,320 \$0 \$249,600

APPENDIX B

City of Fayetteville, Arkansas Noland WRRF Master Plan

All Tasks

WORK TASK DESCRIPTION	E-7	E-5	E-5	E-4	E-4	E-4	E-3	E-2	E-1	D-1	X-2	S-5	S-4	2-Man Crew (Survey)	GARVER	GARVER	тота
	\$398.00	\$282.00	\$282.00	\$234.00	\$234.00	\$234.00	\$180.00	\$145.00	\$120.00	\$112.00	\$94.00	\$181.00	\$137.00	\$219.00	LABOR	DIRECT	
	hr.	hr.	hr.	hr.	hr.		2741 211020										
															\$0		\$0
Subtotal - TASK (6 - Buildout Facility Layout Development)	8	14	0	8	6	18	34	30	40	100	0	0	0	0	\$41,090	\$510	\$41,60
TASK (7 - Capital Improvements Planning)																	
7.1 Summarize accepted recommendations						4	4		8						\$2,616		\$2,61
7.2 Evaluate needs and develop project inventory						12	16	4	40						\$11,068		\$11,06
7.3 Define project triggers						4	8	8	32						\$7,376		\$7,37
7.4 Develop budget level OPCCs for defined projects			8	8		8	8	4	60						\$15,220		\$15,22
7.5 Develop OM budgets for each project						8	8	4	32						\$7,732		\$7,73
7.6 Prioritize each project			4	4		4	8	4	24						\$7,900		\$7,90
7.7 Develop interactive tool					4	8	16	20	40						\$13,388		\$13,3
7.8 Conduct CIP Workshop		4			6	6	6		12						\$6,456	\$516	\$6,97
7.9 Prepare preliminary capital funding schedule						4			8						\$1,896		\$1,89
7.10 Prepare 5-YR CIP Report					4	4	12	8	16	16	16				\$10,408		\$10,4
Quality Control Review	16	8													\$8,624		\$8,62
															\$0		\$0
Subtotal - TASK (7 - Capital Improvements Planning)	16	12	12	12	14	62	86	52	272	16	16	0	0	0	\$92,684	\$516	\$93,20
TASK (8 - Master Plan Report)																	
8.1 Develop Executive Summary, recommendations, conclusions, etc.					8	16	24	10							\$11,386		\$11,38
8.2 Document 5-yr CIP						4	6	2	40						\$7,106		\$7,10
8.3 Develop Implementation Schedule						16	12	4							\$6,484		\$6,48
8.4 Provide draft hard copies and PDF					4		4								\$1,656	\$1,000	\$2,65
8.5 Draft Review Workshop		4			6	6	4	2	12						\$6,386		\$6,38
8.6 Incorporate Owner Comments						4	12	4	24						\$6,556		\$6,55
8.7 Provide final hard copies and PDF					4		4								\$1,656	\$1,482	\$3,13
8.8 Conduct Final Presentation		4			6	8	8		12						\$7,284		\$7,28
Quality Control Review	12	4													\$5,904		\$5,90
															\$0		\$0
Subtotal - TASK (8 - Master Plan Report)	12	12	0		28	54	74	22	88	0	0	0	0	•	\$0 \$54.418	\$2.482	\$0 \$56,9 0
Subtotal - IASK (6 - Master Fran Report)	12	12	U		20	54	74	22	00			U	U	U	\$54,416	\$2,462	\$56,90
Subtotal - Basic Services Section	100	166	64	136	180	504	650	654	1092	132	124	2	8	30	\$673,878	\$13,122	\$687,0
Hours Check	100	166	64	136	180	504	650	654	1092	132	124	2	8	30	673878	11514	68539
Project Totals	100	166	64	136	180	504	650	654	1092	132	124	2		30	6672.076	642.422	6007
Project Totals Project Totals (Cost)	100	100	04	130	100	504	ບວບ	004	1092	132	124	4	0	30	\$673,878	\$13,122	\$687,0

Fayetteville Noland WRRF Master Plan 2 of 2