

City of Fayetteville Staff Review Form

2019-0786

Legistar File ID

12/3/2019

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

Tim Nyander

11/13/2019

WATER SEWER (720)

Submitted By

Submitted Date

Division / Department

Action Recommendation:

Staff recommends approval of an agreement with RJN Group, Inc. in the amount of \$408,543.60 for engineering services associated with the Wastewater Collection System 2020 Master Plan Update.

Budget Impact:

5400.720.5700-5314.00

Water and Sewer

Account Number

Fund

02017.1

Sanitary Sewer Rehabilitation

Project Number

Project Title

Budgeted Item? Yes

Current Budget \$ 5,593,747.00

Funds Obligated \$ 2,296,058.50

Current Balance **\$ 3,297,688.50**

Does item have a cost? Yes

Item Cost \$ 408,543.60

Budget Adjustment Attached? No

Budget Adjustment \$ -

Remaining Budget **\$ 2,889,144.90**

V20180321

Purchase Order Number: _____

Previous Ordinance or Resolution # _____

Change Order Number: _____

Approval Date: _____

Original Contract Number: _____

Comments:



MEETING OF DECEMBER 3, 2019

TO: Mayor and City Council

THRU: Don Marr, Chief of Staff
Tim Nyander, Utilities Director

FROM: Corey Granderson, Utilities Engineer

DATE: November 13, 2019

SUBJECT: **Approval of an agreement with RJN Group, Inc. for engineering services associated with the Wastewater Collection System 2020 Master Plan Update**

RECOMMENDATION:

Staff recommends approval of an agreement with RJN Group, Inc. in the amount of \$408,543.60 for engineering services associated with the Wastewater Collection System 2020 Master Plan Update.

BACKGROUND:

On June 12, 2018 the City of Fayetteville formally selected RJN Group, Inc. via RFQ 18-01 to perform routine updates and analyses of the City's Wastewater Collection System Master Plan. Staff has worked with RJN to develop an appropriate scope and tasks in order to verify the accuracy of the hydraulic model and re-assess changes in service area due to population and development increases. The Arkansas Department of Health, and industry best practices, recommend updating master plans every 5-years for systems like Fayetteville experiencing significant change and growth. The last update to this plan was completed in 2014.

DISCUSSION:

A wastewater hydraulic model is only accurate when field-verified and calibrated using both dry and wet-weather flow monitoring (measuring the actual flow in the pipes). A large portion of the effort needed in this model update is placing and maintaining flow monitors in strategic locations throughout the City in the Spring of 2020. The model will also be updated to include all changes and additions in the wastewater system due to new developments and capital improvement projects. This study will determine future capacity upgrades required and provide capital project cost estimating.

BUDGET/STAFF IMPACT:

This engineering services contract is based on an hourly fee and task matrix, with total costs not to exceed \$408,543.60. Funds are available in the Sanitary Sewer Rehabilitation account.

Attachments:

Engineering Services Agreement with Fee Schedule

AGREEMENT
For
PROFESSIONAL ENGINEERING SERVICES
Between
CITY OF FAYETTEVILLE, ARKANSAS
And
RJN GROUP, INC.

THIS AGREEMENT is made as of _____, 2019, by and between City of Fayetteville, Arkansas, acting by and through its Mayor (hereinafter called CITY OF FAYETTEVILLE) and RJN GROUP, INC. (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 its 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 The Utilities Director is the CITY OF FAYETTEVILLE's project representative with respect to the services to be performed under this Agreement. The Utilities Director 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.
- 3.1.6 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

- 5.1 The maximum not-to-exceed amount authorized for this Agreement is **\$408,543.60**. The CITY OF FAYETTEVILLE shall compensate ENGINEER based on a Unit Price or Lump Sum basis as described in Appendix A.
- 5.2 Statements
 - 5.2.1 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 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

5.3.1 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

5.4.1 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 a release of all claims against 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

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

<u>Type of Coverage</u>	<u>Limits of Liability</u>
Workers' Compensation Employers' Liability	Statutory \$500,000 Each Accident
Commercial General Liability Bodily Injury and Property Damage	\$1,000,000 Combined Single Limit
Automobile Liability: Bodily Injury and Property Damage	\$1,000,000 Combined Single Limit
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

6.2.1 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:

6.5.1.1 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:
- 6.5.2.1 Not less than ten (10) calendar days written notice (delivered by certified mail, return receipt requested) of intent to terminate,
 - 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
- 6.5.3.1 No amount shall be allowed for anticipated profit on unperformed services or other work,
 - 6.5.3.2 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.
- 6.5.7 If, after termination for failure of ENGINEER to fulfill contractual obligations, it is determined that ENGINEER had not failed to fulfill contractual obligations, the termination shall be deemed to have been for the convenience of CITY OF FAYETTEVILLE. In such event, adjustments of the agreement price shall be made as provided in Paragraph 6.5.4 of this clause.
- 6.6 Delays
- 6.6.1 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.

6.8.4 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

6.10.1 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, CAD drawings, estimates, field notes, and project 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, computer models, drawings, specifications and other hard copy or electronic media 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.

6.12.3 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

6.13.1 Any Notice required under this Agreement will be in writing, addressed to the appropriate party at the following addresses:

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

ENGINEER's address:
4170 West MLK Blvd., Suite 907
Fayetteville, AR 72704

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.

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 warrants 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 contingent 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 warranty, 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 exemplary damages in an amount (as determined by CITY OF FAYETTEVILLE) which shall be not less than three nor more than ten times the costs ENGINEER incurs in providing any such gratuities to any such officer or employee.

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.

IN WITNESS WHEREOF, CITY OF FAYETTEVILLE, ARKANSAS by and through its Mayor, and ENGINEER, 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 : _____
Mayor, Lioneld Jordan

By:  _____
Daniel Jackson

ATTEST:

By: _____
City Clerk

Title: Vice-President _____

END OF AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES

APPENDIX A

SCOPE OF SERVICES

- A. SCOPE OF SERVICES:** The Services to be provided under this Agreement shall consist of providing Flow Monitoring, Update and Calibration of Hydraulic Model, Hydraulic Capacity Analysis, Wastewater Collection System Master Plan Update and Report.

GENERAL:

The ENGINEER agrees to perform professional services in connection with the PROJECT as hereinafter stated.

The ENGINEER will serve as the CITY OF FAYETTEVILLE'S professional engineering representative for the PROJECT and will give consultations and advice to CITY OF FAYETTEVILLE during the performance of these services.

A.1 PROJECT ADMINISTRATION AND MANAGEMENT:

A.1.1 PROJECT ADMINISTRATION:

Meet with CITY OF FAYETTEVILLE staff on a periodic basis, to update previous investigative work, to coordinate upcoming work, and to receive any input from staff. Written documentation of each meeting will be provided.

A.1.1.1 Perform general consultation with appointed CITY OF FAYETTEVILLE representative on an as-needed basis. Provide general overview opportunities for CITY OF FAYETTEVILLE personnel for observing regularly scheduled field inspection and testing activities.

A.1.1.2 Perform internal project control procedures on a monthly basis including schedule and budget control, quality control review, and monthly progress reports.

A.1.2 DATA MANAGEMENT:

Obtain existing information provided by CITY OF FAYETTEVILLE including maps, flow and rainfall records, facility as-built drawings, pump curves, overflow occurrence records, CIP status and other pertinent information. CITY OF FAYETTEVILLE will provide ArcView shape files, including contours, and atlas pages of the wastewater collection system and all relevant reports and appendices necessary to prepare the COLLECTION SYSTEM MASTER PLAN. It is anticipated that CITY OF FAYETTEVILLE will provide ENGINEER detailed winter water usage data by service address.

A.1.3 WORKSHOPS:

Workshops will be conducted with the CITY OF FAYETTEVILLE staff to establish the methodologies for creating the MASTER PLAN document. Additional workshops will also be used to establish the criteria and assumptions needed to perform the monitoring program, construct the hydraulic model, calibrate the model, and develop any improvement alternatives. The workshop is expected to cover:

- (i) Goals and purpose for the selected monitoring locations
- (ii) Modeling criteria such as population estimates, loading estimates, dry and weather calibration methodologies, model construction, model integration, land use estimates, etc.
- (iii) Improvement alternatives based on design storm and model run strategies
- (iv) A total of three (3) workshops are anticipated. These will occur at the milestones of the following:
 1. Model Update
 2. Flow Monitoring
 3. Model Evaluation

A.2 FLOW MONITORING:

The flow monitoring program is intended to collect both dry and wet weather flows for a 90-day period. It is anticipated that twenty (20) temporary flow meters owned by the ENGINEER will be installed, serviced and calibrated by ENGINEER on a regular basis.

A.2.1 SITE INVESTIGATION FOR TEMPORARY METERS:

- A.2.1.1 Review the collection system maps, operational information for the collection system, and the proposed hydraulic model network to select strategic flow monitoring locations.
- A.2.1.2 Prepare and submit to CITY OF FAYETTEVILLE staff a map that shows the proposed flow monitoring sites. It is anticipated to utilize the same monitoring locations as the last master plan update.

A.2.2 METER INSTALLATION:

- A.2.2.1 Prepare flow metering equipment for field installation conducting a series of performance and calibration tests to verify equipment meets operating standards. Inspect the key monitoring locations to determine their suitability for installation of the equipment. If a location is identified as being unsuitable, then alternative sites will be identified and evaluated to determine their suitability for installing the selected equipment.
- A.2.2.2 A ninety (90) day monitoring period is predicated on obtaining sufficient dry and wet weather conditions that include at least four (4) storm events of varying rainfall intensities in order to adequately develop and calibrate the hydraulic model. 20 temporary flow meters are assumed in the cost proposal. In the event of adequate rainfall during the 90-day monitoring period, flow meters may be pulled and a credit applied as approved by CITY OF FAYETTEVILLE.

A.2.3 METER MAINTENANCE:

A.2.3.1 Maintain the temporary flow meters over the monitoring period to achieve at least a 90% uptime requirement. Routine service visits shall be performed on a bi-weekly basis to include in-situ depth and velocity confirmations, downloading recorded data, onsite analysis of the data, cleaning of the sensors, and replacing any defective or deficient equipment. In the event telemetry is used, data shall be downloaded and evaluated on a weekly basis. Data shall be reviewed within 24 hours of collection and field technicians will be dispatched within 48 hours to correct any issues identified.

A.2.3.2 Meter Removal (Temporary Meters):

In the event the dry and wet weather criteria have been met by the end of the scheduled monitoring period, recommend the removal of flow meters. If the criteria have not been observed during the scheduled monitoring period, advise CITY OF FAYETTEVILLE to consider extending the monitoring period.

A.2.4 RAIN GAUGE INSTALLATION:

A.2.4.1 Prepare tipping bucket rain gauge equipment for field installation conducting a series of performance and calibration tests to verify equipment meets operating standards. CITY OF FAYETTEVILLE shall recommend CITY OF FAYETTEVILLE-owned sites for potential rain gauge locations. Inspect the proposed gauging locations to determine their suitability for installation of the equipment. If a location is identified as being unsuitable, then alternative sites will be identified and evaluated to determine their suitability for installing the selected equipment.

A.2.4.2 Install rain gauges with 0.01 inch accuracy to satisfy coverage requirements.

A.2.4.3 A ninety (90) day monitoring period is predicated on obtaining at least four (4) storm events of varying rainfall intensities in order to adequately develop and calibrate the hydraulic model. Ten (10) temporary rain gauges are assumed in the cost proposal.

A.2.5 RAIN GAUGE MAINTENANCE:

A.2.5.1 Service rain gauges to obtain a continuous record of rainfall conditions during the monitoring period. Routine service visits shall be performed on a bi-weekly basis to include reading confirmations, downloading recorded data, onsite analysis of the data, cleaning and replacing any defective or deficient equipment. In the event telemetry is used, data shall be downloaded and evaluated on a weekly basis. Data shall be reviewed within 24 hours of collection and field technicians will be dispatched no later than the following working day to correct any issues identified.

A.2.5.2 Rain Gauge Removal (Temporary Rain Gauges):

In the event the dry and wet weather criteria have been met by the end of the scheduled monitoring period, recommend the removal of rain gauges. If the criteria have not been observed during the scheduled monitoring period, advise CITY OF FAYETTEVILLE to consider extending the monitoring period.

A.2.6 FLOW ANALYSIS AND REPORTS:

- A.2.6.1 Edit raw data and develop final calibrated flow data for flow meters.
- A.2.6.2 Develop depth, velocity and quantity hydrographs for dry and wet weather flow conditions.
- A.2.6.3 Utilizing the hydraulic model, confirm that the existing model calibration is valid. Make minor adjustments to the model for flow routing

A.3 HYDRAULIC MODEL UPDATE:

The existing hydraulic model currently contains a hydraulic network calibrated in 2013. The model data in InfoWorks CS model software will be upgraded to InfoWorks ICM model software. All sewer segments constructed since the calibration in 2013 will be input into the model for a complete model network.

For all sewer segments, invert and rim elevations will be obtained from the existing model, GIS, atlases, contour data or from record drawings.

A.3.1 TASKS FOR CONSTRUCTION OF HYDRAULIC MODEL:

- A.3.1.1 Import existing GIS data into the InfoWorks model software.
- A.3.1.2 Obtain record drawings of all available sewers. Obtain invert elevations, diameters, and length data and input to model database.
- A.3.1.3 Conduct field surveys of selected sewer segments to verify or resolve any elevation discrepancies. A total of 300 manhole surveys are included in the scope. Prior to survey, CITY OF FAYETTEVILLE shall verify location of the manholes with a pin flag or paint, uncover any buried manholes, and verify that all covers can be removed and are not seized.
- A.3.1.4 Obtain and review record drawings of all flow equalization basins and input into model database.
- A.3.1.5 Obtain and review record drawings for pump stations and associated force mains and pump curves for major pump stations and input into model database. CITY OF FAYETTEVILLE to provide operational data for all pump stations, including pump curves, operational ON/OFF setpoints, and any operational changes on pump stations.
- A.3.1.6 Redefine any sub-basin or catchment boundaries as needed due to system changes.
- A.3.1.7 Review profiles of all sewer lines and check for continuity and accuracy of model geometry.
- A.3.1.8 Perform visual field inspections as needed to resolve data conflicts.
- A.3.1.9 Recommend additional survey information as required, to ensure model integrity.

A.3.1.10 Update population and land use data to reflect current conditions.

A.4 MODEL VERIFICATION:

The newly updated model will be verified for wet and dry conditions based on flow data from the flow monitoring task.

A.4.1 TASKS FOR MODEL VERIFICATION:

A.4.1.1 Select dry weather period from flow data.

A.4.1.2 Develop dry weather flow unit equivalents.

A.4.1.3 Verify model to dry weather weekday and weekend conditions.

A.4.1.4 Evaluate the design storm scenarios and evaluate the impact on the sewer collection system.

A.4.1.5 Verify model based on selected storm events.

A.4.2 The model will be verified by adjusting various parameters in the model until the model flows match the depth, velocity, and flow recorded by the flow meters. Where the model data cannot be adjusted within acceptable parameters to match monitored conditions, field investigations may be performed to evaluate actual system performance.

A.5 HYDRAULIC CAPACITY ANALYSIS:

A.5.1 Using the verified computer model, ENGINEER shall perform a system analysis for existing dry weather conditions. Normal wastewater production and dry weather infiltration flow components versus available pipe capacity will be analyzed to determine if any potential dry weather hydraulic capacity problems currently exist.

A.5.2 ENGINEER will consult with the CITY OF FAYETTEVILLE to select a Design Storm Event to evaluate the collection system capacity for wet weather conditions. It is anticipated that the same design storm utilized for past modeling (5-year/24-hour storm event with 2-year/60-minute peak intensity) will be utilized in this Update.

A.5.3 Using the selected design storm event, ENGINEER shall perform a system hydraulic analysis under existing population conditions to identify any capacity restrictions within the collection system and determine for each sewer segment, pump station, and force main in the model, the peak flows and the percentage of capacity used for the selected wet weather condition.

A.5.4 Using the selected design storm event, the ENGINEER shall confirm previously recommended upgrades for 2030 are still valid.

A.5.5 Using the selected design storm event, the ENGINEER shall confirm previously recommended upgrades for ultimate build-out are still valid.

A.5.6 Utilizing the model for the selected design storm event ENGINEER will estimate the average daily

flow and peak hour and peak day flows for the WWTPs for the two population scenarios described above.

A.6 COLLECTION SYSTEM MASTER PLAN / REPORT:

The COLLECTION SYSTEM MASTER PLAN consists of several tasks to evaluate the existing system performance and develop any necessary improvement alternatives to transport the projected flows for the scenarios described above.

A.6.1 TASKS FOR COLLECTION SYSTEM MASTER PLAN / REPORT:

A.6.1.1 Level of rainfall induced inflow and groundwater infiltration (I/I).

A.6.1.2 Prioritization of each monitored area for future SSES recommendations.

A.6.1.3 Any necessary capacity improvements for full conveyance to the WWTPs.

A.6.1.4 Peak flow management to downsize, defer or eliminate full conveyance alternative. These may include:

(i) additional system storage

(ii) flow diversion/rerouting

(iii) I/I reduction

(iv) combination of alternatives

A.6.1.5 Existing & future wastewater flow rates to WWTPs

A.6.1.6 Develop COLLECTION SYSTEM MASTER PLAN capital improvement plan (CIP).

A.6.1.7 A draft report will be prepared and three (3) copies submitted to the CITY OF FAYETTEVILLE. The report will include a summary of each task performed and include appendices of all relevant information. After review by the CITY OF FAYETTEVILLE staff, comments will be incorporated into a final report and three (3) copies will be submitted to CITY OF FAYETTEVILLE. An electronic copy of the final report, and an editable, electronic copy of the hydraulic model, will also be provided to the CITY OF FAYETTEVILLE.

APPENDIX A
COMPENSATION

In consideration of the services to be performed under this Agreement, RJN GROUP, INC. shall be paid as per the following compensation schedule.

Task	Task Description	Qty.	Units	Unit Rate \$	Total Cost \$
1	Project Administration	1	LS	\$ 40,780.00	\$ 40,780.00
	Project Admin/Meetings/Workshops				
2	Flow Monitoring				
	FM Investigation / Installation / Maint	20	EA	\$ 7,968.53	\$ 159,370.60
	RG Investigation / Installation / Maint	10	EA	\$ 862.60	\$ 8,626.00
3	Manholes Surveys	300	EA	\$ 90.00	\$ 27,000.00
4	Hydraulic Model Update	1	LS	\$ 62,752.00	\$ 62,752.00
5	Model Verification	1	LS	\$ 32,512.00	\$ 32,512.00
6	Hydraulic Capacity Analysis	1	LS	\$ 15,444.00	\$ 15,444.00
7	Collection System Master Plan / Report	1	LS	\$ 29,416.00	\$ 29,416.00
8	Direct Costs ^{1/}	1	LS	\$ 32,643.00	\$ 32,643.00
	Total Cost				\$ 408,543.60

1/ - Direct costs are associated with the LS unit tasks.

APPENDIX A

SCHEDULE

The project is planned to be completed according to the schedule below with an anticipated Notice to Proceed in January 2020.

Work will be completed by December 31, 2020.

RJN GROUP, INC. shall employ manpower and other resources and use professional skill and diligence to meet the schedule: however, RJN GROUP, INC. shall not be responsible for schedule delays resulting from conditions beyond his control. With mutual agreement, RJN GROUP, INC. and the CITY OF FAYETTEVILLE may modify the project schedule during the course of the project and if such modifications affect the RJN GROUP, INC.'s compensation, it shall be modified accordingly, subject to the CITY OF FAYETTEVILLE's approval.

**PROFESSIONAL ENGINEERING SERVICES
MASTER PLAN UPDATE
FAYETTEVILLE, ARKANSAS**

RJN Group, Inc.

FEE SCHEDULE

Hourly Wage Rates	\$225.00	\$191.00	\$127.50	\$112.50	\$79.00	\$68.00	\$93.50	\$90.00	\$75.00		
	Estimated Man-hours									Task Hours	Direct Cost Breakdown
	PD	PM	PE	FM	FS	FT	GIS	DA	CL		
Master Plan Update											
1 Project Administration											
Project Admin/Meetings/Workshops	56	80	40	40	0	0	0	20	20	256	\$40,780.00
4 Hydraulic Model Update	16	32	64	0	0	0	480	0	0	592	\$62,752.00
5 Model Verification	4	32	200	0	0	0	0	0	0	236	\$32,512.00
6 Hydraulic Capacity Analysis	12	24	64	0	0	0	0	0	0	100	\$15,444.00
7 Collection System Master Plan / Report	24	56	64	0	0	0	0	24	40	208	\$29,416.00
Subtotal Master Plan Update	112	224	432	40	0	0	480	44	60	1392	\$180,904.00

										Qty.	Units	Unit Rate \$	Total Cost \$
Unit Pricing													
2 Flow Monitoring													
FM Investigation									20	EA		444.27	\$8,885.40
FM Installation / Removal									20	EA	\$	1,051.46	\$21,029.20
FM Maintenance									1800	MTR DAY	\$	53.92	\$97,056.00
RG Investigation / Installation / Maint									10	EA	\$	862.60	\$8,626.00
Data Management									90	DAY	\$	360.00	\$32,400.00
3 Manholes Surveys									300	EA	\$	90.00	\$27,000.00
Subtotal Unit Pricing													\$194,996.60

Direct Costs														
4220 Subcontractors: pass-through costs (inc. 10% m/u)										1	LS	\$	22,500.00	\$22,500.00
4400 Printing: Maps, door hangers, copying, reprographics										1	LS	\$	1,000.00	\$1,000.00
4660 Field Supplies: Batteries / Candles / Parts / Crew Supplies										1	LS	\$	2,000.00	\$2,000.00
4690 Operating Costs: office, storage, utilities, bonds, permits, licenses										1	LS	\$	280.00	\$280.00
4750 Travel: apt., hotel, air, car rental, meals, gas, company vehicle use										1	LS	\$	4,088.00	\$4,088.00
4950 Shipping: UPS, Airborne, Postage										1	LS	\$	2,775.00	\$2,775.00
Subtotal Direct Costs													\$32,643.00	

TOTAL PROJECT: \$408,543.60