

**City of Fayetteville Staff Review Form**

**2014-0582**

**Legistar File ID**

**1/20/2015**

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

Jim Beavers

12/29/2014

Utilities Director /  
Utilities Department

**Submitted By**

**Submitted Date**

**Division / Department**

**Action Recommendation:**

Resolution to approve the proposed Professional Engineering Services Contract with RJN Group in the amount of \$891,251.00 for Sanitary Sewer Evaluation Study for Basin SFM-05 and Basin SFM-18/19 and not to exceed \$225,000.00 for design of rehabilitation in Basin SFM-05 for a total of \$1,116,251.00.

**Budget Impact:**

5400.5700.5314.00	Water/Sewer																								
Account Number	Fund																								
02017.1501	Sanitary Sewer Rehabilitation																								
Project Number	Project Title																								
<table border="0" style="width: 100%;"> <tr> <td style="width: 30%;"><b>Budgeted Item?</b></td> <td style="width: 10%; text-align: center;">Yes</td> <td style="width: 30%; border-bottom: 1px solid black;">Current Budget</td> <td style="width: 30%; text-align: right;">\$ 2,675,129.00</td> </tr> <tr> <td></td> <td></td> <td style="border-bottom: 1px solid black;">Funds Obligated</td> <td style="text-align: right;">\$ -</td> </tr> <tr> <td></td> <td></td> <td style="border-bottom: 1px solid black;">Current Balance</td> <td style="text-align: right; border: 1px solid gray;"><b>\$ 2,675,129.00</b></td> </tr> </table>	<b>Budgeted Item?</b>	Yes	Current Budget	\$ 2,675,129.00			Funds Obligated	\$ -			Current Balance	<b>\$ 2,675,129.00</b>	<table border="0" style="width: 100%;"> <tr> <td style="width: 30%;"><b>Does item have a cost?</b></td> <td style="width: 10%; text-align: center;">Yes</td> <td style="width: 30%; border-bottom: 1px solid black;">Item Cost</td> <td style="width: 30%; text-align: right;">\$ 1,116,251.00</td> </tr> <tr> <td><b>Budget Adjustment Attached?</b></td> <td style="text-align: center;">No</td> <td style="border-bottom: 1px solid black;">Budget Adjustment</td> <td style="text-align: right;">\$ -</td> </tr> <tr> <td></td> <td></td> <td style="border-bottom: 1px solid black;">Remaining Budget</td> <td style="text-align: right; border: 1px solid gray;"><b>\$ 1,558,878.00</b></td> </tr> </table>	<b>Does item have a cost?</b>	Yes	Item Cost	\$ 1,116,251.00	<b>Budget Adjustment Attached?</b>	No	Budget Adjustment	\$ -			Remaining Budget	<b>\$ 1,558,878.00</b>
<b>Budgeted Item?</b>	Yes	Current Budget	\$ 2,675,129.00																						
		Funds Obligated	\$ -																						
		Current Balance	<b>\$ 2,675,129.00</b>																						
<b>Does item have a cost?</b>	Yes	Item Cost	\$ 1,116,251.00																						
<b>Budget Adjustment Attached?</b>	No	Budget Adjustment	\$ -																						
		Remaining Budget	<b>\$ 1,558,878.00</b>																						

V20140710

Previous Ordinance or Resolution # \_\_\_\_\_

Original Contract Number: \_\_\_\_\_

Approval Date: \_\_\_\_\_

Comments:



**MEETING OF JANUARY 20, 2015**

**TO:** Mayor Jordan and City Council Members  
**THRU:** Water, Sewer and Solid Waste Committee  
Don Marr, Chief of Staff  
Tim Nyander, Interim Utility Director  
**FROM:** Jim Beavers, P.E. Utilities Engineer  
**DATE:** December 29, 2014

**SUBJECT:** Resolution to approve the proposed Professional Engineering Services Contract with RJN Group in the amount of \$891,251.00 for Sanitary Sewer Evaluation Study for Basin SFM-05 and Basin SFM-18/19 and not to exceed \$225,000.00 for design of rehabilitation in Basin SFM-05 for a total of \$1,116,251.00.

---

**RECOMMENDATION:**

City Administration recommends approval for the proposed Professional Engineering Services Contract with RJN Group in the amount of \$891,251.00 for SSES for Basin SFM-05 and Basin SFM-18/19 and not to exceed \$225,000.00 for design of rehabilitation in Basin SFM-05 for a total of \$1,116,251.00.

**BACKGROUND:**

The proposed 2015 SSES is generally included in the approved 2015 CIP and is a significant part of the City's ongoing sanitary sewer maintenance and rehabilitation. Industry standards and Fayetteville's experiences establish that all of the collection system requires full evaluation every 10 to 15 years. The evaluations and subsequent repairs will prevent future recurrence sanitary sewer overflows (SSO's) and help protect the environment and the City. This project will include the field investigations and development of recommended sewer improvements located in areas within the City of Fayetteville, further described as Basins SFM-05 & SFM-18/19. The areas are estimated to contain approximately 73,000 linear feet of sewer line and 368 manholes, and 230,000 linear feet of sewer line and 1,091 manholes respectively. The contract also includes the design of improvements in Basin SFM-05 and the inspection of the existing 36 inch diameter ductile iron sanitary sewer.

Basin SFM-05 is generally defined as the Scull Creek Basin north of North Street. Basin SFM-18/19 is a high ranked basin contributing significant inflow (9 mgd rate) to the collection system and to the plant. Basin SFM 18/19 is generally defined as an area both west and east of I-49 and south of MLK. Basins SFM-05 and SFM-18/19 were used to produce the 2015 CIP.

**DISCUSSION:**

The RJN Group, Inc. was selected for this project through the City's formal section procedure and purchasing requirements. The scope of work and the proposed fee have been reviewed and negotiated by Utilities Division.

**BUDGET/STAFF IMPACT:**

Budgeted Funds are available in the Sanitary Sewer Rehabilitation project.

**ATTACHMENTS:**

1. Staff Review Form
2. Purchase Order
3. Proposed Contract with RJN Group, Inc.

**City Of Fayetteville**

(Not a Purchase Order)

Requisition No.:	Date: <b>1/20/2015</b>
P.O Number:	Expected Delivery Date:

Vendor #: <b>291</b>	Vendor Name: <b>RJN Group</b>
-------------------------	----------------------------------

Mail Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>
---

Address: <b>12160 Abrams Rd Ste 400</b>	Fob Point:
--	------------

Taxable Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>	Quotes Attached Yes: <input type="checkbox"/> No: <input type="checkbox"/>
--	---

City: <b>Dallas</b>	State: <b>TX</b>	Zip Code: <b>75243</b>	Ship to code: <b>Fay</b>
------------------------	---------------------	---------------------------	-----------------------------

Divison Head Approval:
------------------------

Requester: <b>Cheryl Partain</b>	Requester's Employee #: <b>2548</b>
-------------------------------------	--

Extension: <b>8224</b>
---------------------------

Item	Description	Quantity	Unit of Issue	Unit Cost	Extended Cost	Account Numbers	Project/Subproject #	Inventory #	Fixed Asset #
1	<b>Professional Engineering Services-Design and Conduct SSES for Basins 5, 18 &amp; 19</b>	<b>1</b>	<b>EA</b>	<b>1,116,251.00</b>	<b>1,116,251.00</b>	<b>5400.5700.5314.00</b>	<b>02017.1501</b>		
2									
3					<b>\$0.00</b>				
4					<b>\$0.00</b>				
5					<b>\$0.00</b>				
6					<b>\$0.00</b>				
7					<b>\$0.00</b>				
8					<b>\$0.00</b>				
9					<b>\$0.00</b>				
10					<b>\$0.00</b>				
	Shipping/Handling		Lot		<b>\$0.00</b>				

Special Instructions:  
\_\_\_\_\_

Subtotal:	<b><u>\$1,116,251.00</u></b>
Tax:	<b><u>\$0.00</u></b>
Total:	<b><u><u>\$1,116,251.00</u></u></b>

Approvals:

Mayor: _____	Department Director: _____	Purchasing Manager: _____
Finance & Internal Services Director: _____	Budget Manager: _____	IT Manager: _____
Dispatch Manager: _____	Utilities Manager: _____	Other: _____

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

THIS AGREEMENT is made as of \_\_\_\_\_, 2015, 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 Exhibit 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 Provide such professional legal, accounting, financial, and insurance counseling services as may be required for the Project.
  - 3.1.6 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.
  - 3.1.7 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 Exhibit B.

**SECTION 5 - PAYMENTS TO ENGINEER**

- 5.1 The maximum not-to-exceed amount authorized for this Agreement shall be based on a Unit Price or Lump Sum basis as described in Exhibit C. Unit price items shall be invoiced based on unit items completed. Lump sum items shall be invoiced based on percentage completion.
- 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 72701

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 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 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

RJN GROUP, INC.

By: \_\_\_\_\_  
Mayor, Lioneld Jordan

By: Hugh M. Kelso  
Hugh M. Kelso

ATTEST:

By: \_\_\_\_\_  
City Clerk

Title: Vice President

END OF AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES

**EXHIBIT A  
SCOPE OF SERVICES**

**CITY OF FAYETTEVILLE  
SEWER SYSTEM STUDY  
BASINS SFM-05 & SFM-18/19**

This section is a detailed description of the Work Plan that will be implemented for this project. Specific Work items were developed based on our understanding of the project needs, our familiarity with the City of Fayetteville's Wastewater Collection System, and our experience with many similar projects. The project will include the field investigations and development of recommended sewer improvements located in areas within the City of Fayetteville, further described as Basins SFM-05 & SFM-18/19. The areas are estimated to contain approximately 73,000 linear feet of sewer line and 368 manholes, and 230,000 linear feet of sewer line and 1,091 manholes respectively.

A description of the Work Plan is included in the following sections.

Work Plan

The Work Plan for the City of Fayetteville includes all the necessary engineering, planning, and field work for developing a Sewer Rehabilitation Plan.

**SEWER SYSTEM STUDY**

- A. Project Administration
1. Mobilize project team.
  2. Meet with City of Fayetteville staff on a bi-monthly basis to develop project strategy, coordinate upcoming work, and receive City of Fayetteville input.
  3. Prepare a final schedule of work activities.
  4. Provide general consultation with representative City of Fayetteville staff on an as-needed basis.
  5. Perform internal project control procedures on a monthly basis including schedule and budget control, quality control review, and monthly progress reports.
  6. Perform administration and coordination of subconsultants including contract finalization, performance, coordination, and payment requests.

## B. Data Management

1. All field inspection data will be reviewed to ensure that the field data is complete and free from obvious errors or inaccuracies. Smoke test photos will be reviewed to ensure that background reference features appear in the photo. Manhole, visual pipe, smoke test and dyed water forms will be reviewed to ensure that they correlate with the City of Fayetteville's GIS system. Data entry will be performed concurrently with the field inspections to ensure that errors are identified, addressed, and corrected as soon after the inspection was performed as possible.
2. All manhole, visual pipe, smoke testing, dyed water and any other observed defects will be captured with a digital camera and loaded on to a CD for delivery to the City of Fayetteville.
3. Prepare a map of the study areas utilizing the numbering system developed by the City. The GIS numbering system will be cross referenced with the earlier numbering system.
4. Discrepancies between the City of Fayetteville's GIS and actual field conditions will be recorded on standard forms and periodically delivered to the City of Fayetteville.
5. Develop listing of all buried and inaccessible manholes and provide to City of Fayetteville.
6. Obtain preliminary sewer segments length and diameters from existing database. Review and modify database as differences are found during field survey activities.

## C. Flow Meter Site Investigation / Installation / Removal

1. Prior to installing flow monitors, the Engineer will develop a flow monitoring plan. The flow monitoring plan will include the preliminary monitoring sites selected from a review of the City of Fayetteville's existing sewer maps. These sites are based on previous monitoring locations along with select new locations. Special attention areas or split flow conditions may require additional flow monitors. Potential flow monitoring sites will be identified with consideration given to sub-basin size, evidence of surcharging, overflow locations, projected maintenance activities, and other factors. Potential and alternate sites will be inspected and the site hydraulics evaluated.
2. The Engineer will conduct field investigations to verify the suitability of each potential monitoring location. The field investigations will verify sewer line interconnectivity and sewer flow direction in various locations across the collection system and in the proposed meter locations. The Engineer will prepare a site investigation sheet for each selected site and will submit to the City of Fayetteville.

3. After approval of the recommended sites, the Engineer will install, calibrate, and connect each meter to a remote monitoring network using cellular modems.
4. The Engineer will calibrate existing City of Fayetteville flow meters within the study area and connect each meter to a remote monitoring network using cellular modems.
5. Upon completion of the flow monitoring period, the Engineer will remove all equipment owned by the Engineer and repair all manhole penetrations. The City of Fayetteville will repair any damages to manhole epoxy coatings.

D. Flow Monitoring

1. After approval of the recommended sites, the Engineer will install and maintain temporary flow meters for up to 60-days in an effort to obtain sufficient dry and wet weather conditions that include at least four (4) storm events of significant rainfall intensities. If the criteria have not been observed during the scheduled monitoring period, advise City of Fayetteville to consider extending the monitoring period.
2. The Engineer will maintain existing City of Fayetteville flow meters within the study area for the duration of the monitoring period.
3. The Engineer will service the flow meters on a regular basis and obtain bi-weekly manual depth and velocity profiles to verify the accuracy of the meters.
4. The Engineer will use the City of Fayetteville's rain gauge network during the study.

E. Manhole Inspection

1. Whenever possible, the Engineer will conduct full descent inspections of every accessible manhole in the collection system. Confined space entry procedures will be followed. The following manhole components will all be inspected for signs of I/I and for structural soundness: the manhole cover, cover to frame fit, the manhole frame, the frame-to-chimney seal, the chimney condition, the corbel condition, the wall condition, the step condition, the bench, the invert, and each pipe seal. Other information will also be obtained relative to the manhole location, grade elevation, ponding potential, manhole diameter and depth, construction materials, active I/I, evidence of I/I, and evidence of surcharge. Rim to invert measurements and the general orientation of all connecting lines will be recorded. Manholes which are surcharged during average flow conditions will be identified and turned over to the City of Fayetteville for cleaning prior to smoke testing. The City of Fayetteville may at its discretion, request that the Engineer remove such blockages. Photographs will be taken of all severe or unusual manhole



defects or configurations and will be loaded as digital photos into the project database.

2. The Engineer will make a reasonable effort to locate manholes as shown on the City of Fayetteville's maps. The effort will include up to 10 minutes of onsite investigation including a metal detector, probe, and shovel. Manholes found to be buried less than 6-inches below grade in non-paved areas shall be uncovered and inspected by the Engineer. If the manhole cannot be located within 10 minutes of arriving onsite, or the manhole is buried in a paved area or greater than 6-inches below grade in a non-paved area, the Engineer will notify the City of Fayetteville of the unable to locate manhole or buried manhole for the City of Fayetteville to locate or uncover.
3. The City of Fayetteville will assist the Engineer with traffic control in high traffic areas that include AHTD right-of-way and major collectors Gregg Avenue and Sycamore Street. The City of Fayetteville will be responsible for any temporary permits required for AHTD right-of-way inspections.
4. While inside the manhole, each of the incoming pipes will be inspected for signs of cracking, collapse, root intrusion, deposition, grease, offset joints, active infiltration, or other defects. Additional information such as pipe diameter and material will also be collected. Lines with observable structural defects will be earmarked as candidates for future television inspections. Pipe diameter measurements will be rounded to the nearest tenth of an inch.
5. Manholes which present inconclusive evidence of I/I will be earmarked as candidates for dye water testing in order to substantiate whether or not the suspect component is an I/I source. A prioritized list of manholes with suspect components will be developed and presented to the City of Fayetteville for review.

#### F. Smoke Testing

1. Smoke testing will be conducted using dual axial blowers. Smoke testing lengths will be limited to one line segment between the upstream and downstream blower locations. Each 12-inch diameter and smaller segment will be isolated by sandbagging. Smoke candles will be used to generate smoke for the smoke testing. Segments totaling less than 500 feet may include straight through manholes. Smoke testing will be performed only during dry ground periods which are anticipated to be between July and September.
2. Flags will be placed at observed smoke locations and digital images will be captured. All defects identified by smoke testing will be flagged and photographed. Smoke defect locations will be recorded on sketches or by obtaining GPS coordinates. All private sector smoke defect images will be entered into the field inspection database.

3. Main line defects and service lateral defects will be carefully scrutinized to ensure that a conservative determination of public vs. private side defects is made. If necessary the line will be earmarked for television inspection.
4. During the smoke testing, each building in the vicinity of the line segment will be observed for evidence of illegal or illicit connections, or other defects. All such defects will be noted in the smoke test database. Where suspect defects are identified but are not confirmed by the smoke test, the building address, type, and suspected defect will be noted. All such buildings will be submitted to the City of Fayetteville as candidates for a detailed building inspection or dyed water flooding. Upon review and approval by the City of Fayetteville these buildings will be subsequently inspected by the Engineer.

G. Public Relations

1. Public relation activities will be included to inform the public and industries in the study are of upcoming field work. The primary focus will be on smoke testing activities. Specific tasks will include:
  - A. Coordinate smoke testing activities with representatives of the City of Fayetteville. Notify City representatives daily of anticipated smoke testing locations.
  - B. Provide door hangers for notification of residents during smoke testing activities.

H. Dyed Water Flooding

1. Line segments requiring dye water testing will be identified on the basis of smoke test results. Prior to initiating dye water testing, a list of line segments recommended for dyed water testing will be provided to the City of Fayetteville for review and approval. The line segments on the list will be annotated as to the priority and reason for recommendation.
2. Dyed water flooding will be conducted at selected locations prior to television inspection to verify the existence of inflow and infiltration sources. Dye testing will also be conducted concurrently with television inspections on those line segments approved by the City of Fayetteville for dye testing. The City of Fayetteville shall provide water for dyed water flooding at no charge to the Engineer. The Engineer shall check out a water meter from the City of Fayetteville for water usage metering.
3. The dye water will be induced into the line by flooding storm sewers and drainage ditches. Sufficient time will be allowed for the source to activate, at which time the television inspection equipment will be introduced into the line segment.

I. Cleaning and Television Inspection / Concurrent Dye Testing

1. Engineer will perform light cleaning and television inspection only to maintain the project schedule, and only after the approval of the City of Fayetteville. Television inspections will be performed on line segments which show evidence of deterioration, either through visual pipe inspections or through smoke testing. Evidences of deterioration include active I/I, roots, offset joints, cracked or collapsed pipe, blockages, surcharging, or deterioration and damage as evidenced by smoke emission during smoke testing. Upon completion of the visual pipe inspections and smoke testing, defective line segments will be prioritized and a recommendation for television inspection will be developed. Lines recommended for television inspection will be listed by priority along with justification for the recommendation, and presented to the City of Fayetteville for review and discussion. Lines for which acceptable television data is on hand will be excluded from the list and will not be re-televised. Line segments that exhibit defects from smoke testing, and the existing TV tape does not reveal defects, will be recommended to be re-televised. Upon approval, the television inspection work will be scheduled and initiated. Television inspection will be performed using high quality color equipment and coded using RJN standards. Where appropriate, concurrent dye testing will be conducted to pinpoint I/I sources. Contractor costs will be submitted to the City of Fayetteville to be applied against an allowance once the level of effort is defined.
2. Perform cleaning and internal TV inspection of selected sewer lines and record findings. Sanitary sewer lines will be cleaned in order to facilitate the televised inspection activities. Standard cleaning rates are based on two or three passes with a jet cleaner. In the event that additional cleaning or root cutting is necessary, the Engineer will notify the City of Fayetteville and obtain approval to perform heavy cleaning at the rates specified. Root cutting is included in the heavy cleaning rates.
3. During cleaning operations, all sludge, debris, etc. will be removed from the sewer and disposed of at a location provided by the City of Fayetteville. The City of Fayetteville shall provide water for the cleaning operation and disposal of debris removed from the sewer at no charge to the Engineer. The Engineer shall check out a water meter from the City of Fayetteville for water usage metering. Concurrent dyed water flooding will be performed with TV inspection to verify locations of inflow defects. All data will be provided in digital format.
4. The Engineer will review each video and incorporate findings in the data analysis.

J. Data Analysis / Report

1. At the conclusion of the field investigation services, an engineering analysis of field survey data will be performed to develop recommendations for prioritizing I/I source repairs.
2. Develop rehabilitation and improvement costs for manhole and line repairs.
3. Perform priority analysis for infiltration rehabilitation plan based on applicable rehabilitation method, material, and costs.
4. Perform priority analysis for inflow rehabilitation plan based on applicable rehabilitation method, material and costs.
5. Develop recommendations for rehabilitation of both public and private I/I sources in priority order, cost estimates by individual rehabilitation type, and estimated I/I reduction as a result of the recommendations.
6. A capital improvement plan will be developed to provide a rehabilitation plan, a staged priority schedule, and budget costs for recommended projects.
7. The report will consist of a narrative discussion of the hydraulic analysis, field investigations, exhibits, tables, and supporting information. The report will include findings, conclusions, and recommendations. It will be organized and presented in meaningful graphics, figures, and tables.
8. Three (3) copies of the draft report will be delivered to the City of Fayetteville for review and comments. Written comments will be received from the City of Fayetteville and incorporated in the Final Report.
9. The Engineer will incorporate the written comments of the City of Fayetteville and five (5) copies will be delivered to the City of Fayetteville. The final report will also be provided digitally to the City of Fayetteville in an electronic format for ease of review.
10. The Engineer will review the final report with the City of Fayetteville. The review will cover the condition of the collection system with regard to the proposed system rehabilitation, cost estimate and other needs and requirements.

K. Rain Gauge Installation

1. The Engineer will provide and install ten (10) permanent electronic rainfall sensors with heaters. Each rainfall sensor shall have a resolution of 0.01" with a resolution of +/- 1.0% at a rainfall intensity of 2"/hr or less. The heater shall activate when the outside temperature reaches 45° F or lower.

2. The Engineer will provide all hardware necessary to securely mount and level each rainfall sensor at locations approved by the City of Fayetteville.
3. Each location approved by the City of Fayetteville shall have permanent 120 VAC power provided by the City of Fayetteville. The City of Fayetteville shall provide all necessary electrical connections from the rainfall sensor to electrical power and equipment and connection required to connect to the City of Fayetteville's SCADA system.

L. Permanent Flow Meter Telemetry

1. The Engineer will provide and install seventeen (17) permanent cellular modem units on existing City of Fayetteville flow meters. The units will include an interface cable between the existing flow meter and the telemetry unit and an antenna mounted outside of the manhole.
2. The Engineer will provide all hardware necessary to securely mount the unit along with the existing flow meter. Installation will include a manhole wall penetration for the antennae cable. The Engineer will repair all manhole penetrations. The City of Fayetteville will repair any damages to manhole epoxy coatings.
3. The Engineer will provide a hosted data site via web access for the City of Fayetteville to view and download collected data. Charges for data hosting, editing, and review are not included in this contract.
4. The City of Fayetteville will select a cell service provider and pay for all monthly data fees incurred.

M. 36-inch Sewer Line Inspection – Happy Hollow to Noland WWTP

1. Approximately 25,500 linear feet of 36-inch ductile iron gravity sewer line will be inspected using high quality color television inspection equipment and coded using RJN standards.
2. Internal CCTV inspection of the existing 36-inch ductile iron pipes will be performed to visually assess the condition of pipe and original polyethylene liner. Noticeable defects in the liner and evidence of corrosion will be documented.
3. The Engineer may request the City of Fayetteville to install stop logs at the diversion structure at Happy Hollow to divert wastewater flow as necessary prior to CCTV inspection.
4. The sewer lines will be inspected without cleaning. The level of debris will be estimated during CCTV inspection. A cleaning schedule will be recommended upon completion of the inspection.

5. The Engineer will review each video and incorporate findings in the data analysis. Further investigations may be recommended to determine the level of deterioration.

## **DESIGN SERVICES**

The Engineer will provide the final engineering design and construction observation for the recommended rehabilitation as approved by the City of Fayetteville. The final compensation for these future services will be negotiated after the extent of the improvements are known. The detailed scope of future services is as follows:

## **FINAL ENGINEERING DESIGN/BIDDING ASSISTANCE**

### **A. Manhole Rehabilitation Design**

1. Review data from the SSES to determine I/I sources to be rehabilitated.
2. Evaluate site specific manhole repair alternatives including cover type, grade adjustments, sealing techniques, manhole interior repairs, and/or manhole replacement.
3. Using City of Fayetteville's basic specifications, prepare project specifications which will include but not be limited to: (1) bidding documents, (2) contractual documents, (3) conditions of the contract, (4) standard project forms, (5) technical specifications, (6) schedule of manhole rehabilitation, (7) location maps and (8) general details.
4. Prepare Engineer's Opinion of Probable Construction Cost.
5. Submit two (2) copies of the draft contract documents to the City of Fayetteville for review.
6. Perform final changes to contract documents based on City of Fayetteville review.
7. Submit two (2) copies of the final contract documents to the City of Fayetteville.

### **B. Sewer Line Rehabilitation**

The extent of sewer rehabilitation is not known at this time. The actual quantities of design will be determined after the review of the previous inspection data and any subsequent inspections are performed. Generally, the sewer line design activities will include the following:

1. Review reports for infiltration and inflow sources to be rehabilitated, sewer line maintenance items, and sewer line replacement.
2. Perform sewer profile level survey and site inspections for sewer replacement.
3. Investigate public utility locations.
4. Evaluate pipe repair alternatives including pipe replacement, pipe bursting, and lining options as necessary due to site conditions.
5. Provide the City of Fayetteville with the technical information for location of the easements, if any, required for construction of the project. Information to include width and general location of the easements, and distances from the property lines. Property line information will be obtained from existing maps provided by the City of Fayetteville to the Engineer.
6. Prepare contract design drawings for I/I rehabilitation, sewer replacement and/or sewer lining. Drawings will indicate permanent and temporary easements for construction based on information supplied by City of Fayetteville. Drawings will include but not be limited to: (1) title sheet/drawing index, (2) location maps, (3) schedule of manhole rehabilitation, (4) plan and profile of replacement segments, (5) plan of repair line segments, (6) special details, and (7) general details.
7. Using City of Fayetteville's basic specifications, prepare project specifications which will include but not be limited to: (1) bidding documents, (2) contractual documents, (3) conditions of the contract, (4) standard project forms, and (5) technical specifications.
8. Prepare Engineer's Opinion of Probable Construction Cost by major items.
9. Submit two (2) copies of the draft plans and specifications to the City of Fayetteville for review.
10. Perform final changes to contract documents.
11. Submit two (2) copies of the final project drawings and contract specifications to the City of Fayetteville for review.
12. Assist the City of Fayetteville in obtaining permit approvals from regulatory authorities.

C. Additional Services

1. Conduct horizontal and vertical control survey necessary for design of the project.

2. Obtain typical soil boring data for replacement sewer locations, as required.
3. After approval by the City of Fayetteville, the Engineer will prepare, type, and issue legal description of easements. The City of Fayetteville will secure easements as necessary.
4. Assistance in obtaining permit from Highway Department, Health Department, and any other state permits, if necessary, for sewer construction.

D. Bidding Assistance

It is anticipated that two (2) construction contracts will be bid. The first contract to be completed and bid will include justified manhole rehabilitation activities and any other readily confirmed cost-effective maintenance activities. The second contract bid will include justified sewer line and appurtenant elements, including maintenance, repair, rehabilitation and replacement work. The following bidding assistance services are included for the two contracts.

1. Assist the City of Fayetteville in advertising, obtaining, and evaluating Bid Proposals for the construction contract and awarding thereof. Provide assistance to the CITY in responding to bidder inquiries during advertisement of the construction contract, and participate in project pre-bid conference. Provide and distribute bidding documents and addendum. Non-refunded bid deposits will remain the property of Engineer for administrative, printing, and handling cost.
2. Assist the City of Fayetteville in reviewing the bids for completeness and accuracy. Develop bid tabulations and submit a written recommendation of contract award to the City of Fayetteville along with three (3) copies of the bid tabulations.
3. Consult with and advise the City of Fayetteville on the responsibility and responsiveness of contractors, the acceptability of subcontractors, substitute materials, and equipment proposed by the project bidders.

**CONSTRUCTION**

The Engineer is available to provide resident engineering services during construction under a separate negotiated amendment. These services may include the following:

A. Resident Engineering

1. Provide the successful bidder(s) with three (3) sets of the contract specifications for execution and the insertion of the required insurance certificates. Provide the successful bidder(s) with five (5) sets of the contract documents for construction purposes.



2. Assist the City of Fayetteville in conducting a pre-construction conference with the Contractors by notifying utilities, governmental agencies, and other interested parties, and answer questions at the conference.
3. Review shop drawings, scheduling, test results, and other submittals which the Contractor is required to submit.
4. Consult with City of Fayetteville and act as the City of Fayetteville's engineering representative in dealings with the Contractor. Issue instructions of City of Fayetteville to Contractor and issue necessary interpretations and clarification of the contract specifications.
5. Provide engineering survey(s) for construction to establish horizontal and vertical reference points which are necessary for the Contractor to construct the work. Coordinate the taking of preconstruction photos and surface video documentation with the Contractor as necessary.
6. Provide resident observation for rehabilitation and sewer replacement construction for general conformance to the contract drawings and contract specifications. Also provide resident observation of acceptance testing and restoration work by the Contractor.
7. Review and respond to complaints received by City of Fayetteville and report any differences of opinion between the Contractor, Engineer and complaining party.
8. Review applications for partial payment with the Contractor for compliance with contract specifications and submit to the City of Fayetteville a recommendation for payment.
9. Issue field orders to Contractor after consultation with the City of Fayetteville. Review any change orders proposed by the Contractor and provide recommendations to the City of Fayetteville.
10. Conduct an on-site review to determine if the projects are substantially complete and submit to the Contractor a list of observed items requiring completion or correction.
11. Conduct a final on-site review, in the company of the City of Fayetteville and Contractor, to verify the projects are fully complete. Submit a recommendation for final acceptance of the projects to the City of Fayetteville.
12. Provide the City of Fayetteville with three (3) sets of black line prints of the record drawings.
13. Provide the City of Fayetteville with a report that summarizes I/I sources that have been removed and listing of line segments and their attributes that have been added.

14. The Engineer will not be responsible for the means or sequences of the construction work or the implementation program for safety of the construction contractor and subcontractors and it will be stipulated as such in the contract documents.

## EXHIBIT B

### AUTHORIZATION PROGRESS AND COMPLETION

The City and Engineer agree that the project is planned to be completed according to the schedule below with anticipated Notice to Proceed in late January 2015.

<u>Major Tasks</u>	<u>Months from Notice to Proceed</u>
Sewer System Study	11

The Engineer will employ manpower and other resources and use professional skill and diligence to meet the schedule; however, he will not be responsible for schedule delays resulting from conditions beyond his control. With mutual agreement, the City of Fayetteville and the Engineer may modify the project schedule during the course of the project and if such modifications affect the Engineer's compensation, it will be modified accordingly, subject to City Council approval.

For Special Services, the authorization by the City of Fayetteville shall be in writing and shall include the definition of the services to be provided, the schedule for commencing and completing the services and the basis for compensation therefore, all as agreed upon by the City of Fayetteville and Engineer in writing.

**EXHIBIT C  
SUMMARY OF COST**

**CITY OF FAYETTEVILLE  
SEWER SYSTEM STUDY  
BASINS SFM-05 & SFM-18/19**

Task Description	Quantity	Unit Cost	Cost (\$)
<b><u>PHASE I</u></b>			
<b><u>Sewer System Study – SFM-05 &amp; SFM-18/19</u></b>			
A. Project Administration	1	\$37,772/LS	37,772.00
B. Data Management	1	\$32,440/LS	32,440.00
C. Flow Meter Site Investigation / Installation / Removal	20	\$1,464.20/EA	29,284.00
D. Flow Monitoring	1,200	\$78.14/M-D	93,770.00
E. Manhole Inspection (ROW + 20')	864	\$107.81/EA	93,146.00
F. Manhole Inspection (> ROW + 20')	595	\$124.52/EA	74,088.00
G. Smoke Testing (Dual-Blower)	303,000	\$0.469/LF	142,148.00
H. Public Relations	303,000	\$0.04/LF	12,208.00
I. Dyed Water Flooding	40	\$449.20/EA	17,968.00
J. Cleaning and Television Inspection	<u>1</u>	<u>1</u>	103,020.00
CCTV Review	30,300	\$1.20/LF	36,360.00
K. Data Analysis / Report	1	\$59,072/LS	<u>59,072.00</u>
Total SSES Cost			731,276.00
<b><u>Rain Gauges</u></b>			
A. Rain Gauges	10	\$1,545/EA	<u>15,450.00</u>
<b><u>Flow Meter Telemetry</u></b>			
A. Flow Meter Telemetry	17	\$3,000/EA	<u>51,000.00</u>
<b><u>36-INCH SEWER INSPECTION</u></b>			
A. Inspection of 36-inch sewer line	25,500	\$3.75/LF	<u>95,625.00</u>
<b>TOTAL PHASE I COST</b>			<b>891,351.00</b>
<b><u>PHASE II FINAL DESIGN</u></b>	<u>2/</u>	<u>2/</u>	<b>225,000.00</b>
<b><u>PHASE III CONSTRUCTION</u></b>	<u>3/</u>	<u>3/</u>	<u>3/</u>

1/ Allowance for cleaning and TV inspection will be invoiced based on the unit prices contained in Exhibit D.

2/ Allowance for engineering design in Basin SFM-05. Final fee to be negotiated after the extent of the improvements are known.

3/ To be negotiated under a separate amendment to this Agreement.

**EXHIBIT D**

**TELEVISION INSPECTION COMPENSATION  
BASINS SFM-05 & SFM-18/19**

<b>Description</b>	<b>Unit</b>	<b>Unit Price</b>
Light Cleaning (3 passes) 6-10" Street Access	L.F.	\$1.38
Light Cleaning (3 passes) 12-15" Street Access	L.F.	\$1.60
Light Cleaning (3 passes) 18-24" Street Access	L.F.	\$2.75
Light Cleaning (3 passes) 6-10" Easement/Remote	L.F.	\$2.75
Light Cleaning (3 passes) 12-15" Easement/Remote	L.F.	\$2.75
Light Cleaning (3 passes) 18-24" Easement/Remote	L.F.	\$3.30
Light Cleaning (3 passes) 30-36" Easement/Remote	L.F.	\$3.85
Light Cleaning (3 passes) 42" Easement/Remote	L.F.	\$4.13
Post CCTV 6-10" Street Access	L.F.	\$1.38
Post CCTV 12-15" Street Access	L.F.	\$1.38
Post CCTV 18-24" Street Access	L.F.	\$1.38
Post CCTV 6-10" Easement/Remote	L.F.	\$2.20
Post CCTV 12-15" Easement/Remote	L.F.	\$2.20
Post CCTV 18-24" Easement/Remote	L.F.	\$2.20
Post CCTV 30-36" Easement/Remote	L.F.	\$2.20
Post CCTV 42" Easement/Remote	L.F.	\$2.20
Heavy Cleaning	HOUR	\$242.00
Mobilization/De-Mobilization	L.S	\$2,750.00