

**City Council Agenda Items  
and  
Contracts, Leases or Agreements**

20-Nov-12

City Council Meeting Date  
Agenda Items Only

David Jurgens  
Submitted By

Wastewater Treatment  
Division

Utilities  
Department

**Action Required:**

Approval of Contract Amendment 3 with CH2M Hill Engineers, Inc. for \$7,224,875 for operation, maintenance, management and engineering services for the City's wastewater treatment facilities and systems in 2013, and approving a \$70,000 contingency.

\$ 7,294,875  
Cost of this request

5400.5100.5328.00 - 5400.5140.5328.00  
Account Number

08048  
Project Number

\$ 7,294,875  
Category / Project Budget

\$ -  
Funds Used to Date

\$ 7,294,875  
Remaining Balance

Wastewater Treatment  
Program Category / Project Name

Wastewater Treatment  
Program / Project Category Name

Water/Sewer  
Fund Name

Budgeted Item

Budget Adjustment Attached

*David Jurgens*  
Department Director

2 Nov 12  
Date

Previous Ordinance or Resolution # 256-09

*Paula Beck*  
City Attorney

11-2-12  
Date

Original Contract Date: 12/15/2009

Original Contract Number: 2113

*Paula Beck*  
Finance and Internal Services Director

11-5-2012  
Date

Received in City Clerk's Office 11-02-12 P01:53 RCVD  
*USB*

*Don Man*  
Chief of Staff

11-6-12  
Date

Received in Mayor's Office  
ENTERED 11/2/12  
*PH*

*Frank Jordan*  
Mayor

11/8/12  
Date

Comments:

To: Fayetteville City Council

Thru: Mayor Lioneld Jordan  
Don Marr, Chief of Staff

From: David Jurgens, Utilities Director  
Fayetteville Water and Sewer Committee

Date: October 30, 2012

Subject: Contract Amendment 3 with CH2M HILL Engineers, Inc. for \$7,224,875 for operation, maintenance, management and engineering services for the City's wastewater treatment facilities and systems

## **RECOMMENDATION**

Staff recommends approving Contract Amendment 3 with CH2M HILL Engineers, Inc. for \$7,224,875 for operation, maintenance, management and engineering services for the City's wastewater treatment facilities and systems, and approving a \$70,000 contingency.

## **BACKGROUND**

When the Noland WWTP upgrade was completed in 1987, the City contracted with OMI (now CH2M HILL) for wastewater treatment services. The scope of services provided by CH2M HILL include: (1) operate and maintain the Noland and West Side Wastewater Treatment Plants (WWTP); (2) operate and/or maintain 43 wastewater pump station sites; (3) administer the City's NPDES discharge, air, stormwater, and other permits; (4) manage the City's biosolids disposal program; (5) manage the City's industrial pretreatment program; (6) support the SCADA (supervisory control and data acquisition system) network that monitors water and wastewater facilities; (7) pursue operation economies, efficiencies, and permit compliance; and (8) participate in the construction and post-construction work of the Wastewater System Improvement Project (WSIP). In late 2009, the City underwent a rigorous selection process with three competitive proposals. The selection committee selected CH2M HILL for a five year contract, which expires December 31, 2014.

## **DISCUSSION**

The 2013 contract amendment updates the scope of services from the 2012 contract, with evolutionary changes reflecting biosolids drying, updated regulatory requirements, and wastewater treatment related engineering services. To encourage cost saving operations, the contract contains an incentive provision whereby budget savings are distributed 87.5% to the City and 12.5% to CH2M HILL. The 2013 contract amendment reflects a \$567,941 cost increase from 2012, primarily due to increased operational expenses expected in dredging Lake Sequoyah. The contingency is requested to allow for potential expenses due to increased regulatory requirements with the new NPDES permits and other unknowns. Highlights of changes are below:

- 1) New USPEA NPDES discharge permits expected for both wastewater plants.
- 2) Biosolids drying process coming on line, reducing hauling and landfilling costs.
- 3) Beaver Water District sludge land application process coming on line, increasing operating costs that are covered in full by the charges for the service.
- 4) Lake Sequoyah dredging program.

## **BUDGET IMPACT**

The \$7,224,875 contract and \$70,000 contingency costs are included in the proposed 2013 Budget. Execution of this contract is contingent on approval of the 2013 budget.

**RESOLUTION NO. \_\_\_\_\_**

A RESOLUTION APPROVING CONTRACT AMENDMENT NO. 3 WITH CH2M HILL ENGINEERS, INC. IN THE AMOUNT OF \$7,224,875.00 FOR OPERATION, MAINTENANCE, MANAGEMENT AND ENGINEERING SERVICES FOR CITY WASTEWATER TREATMENT FACILITIES AND SYSTEMS IN 2013 SUBJECT TO APPROVAL OF THE 2013 ANNUAL CITY BUDGET AND WORK PROGRAM, AND APPROVING A \$70,000.00 CONTRACT CONTINGENCY

**BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF FAYETTEVILLE, ARKANSAS:**

Section 1. That the City Council of the City of Fayetteville, Arkansas hereby approves Contract Amendment No. 3 with CH2M Hill Engineers, Inc., a copy of which is attached as Exhibit "A", in the amount of \$7,224,875.00 for operation, maintenance, management and engineering services for city wastewater treatment facilities and systems in 2013 subject to approval of the 2013 annual city budget and work program.

Section 2. That the City Council of the City of Fayetteville, Arkansas hereby approves a \$70,000.00 contract contingency.

**PASSED and APPROVED** this 20<sup>th</sup> day of November, 2012.

APPROVED:

ATTEST:

By: \_\_\_\_\_  
**LIONELD JORDAN**, Mayor

By: \_\_\_\_\_  
**SONDRA E. SMITH**, City Clerk/Treasurer

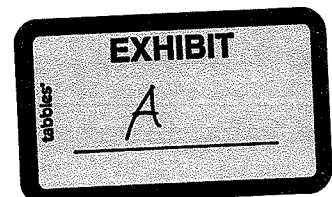
**AMENDMENT NO. 3 TO AGREEMENT**  
**For**  
**OPERATIONS, MAINTENANCE, AND MANAGEMENT SERVICES**  
**Between**  
**CITY OF FAYETTEVILLE, ARKANSAS**  
**And**  
**CH2M HILL ENGINEERS, INC.**

THIS AMENDMENT NO. 3 to the Agreement for Operations, Maintenance and Management Services between the City of Fayetteville, Arkansas, Wastewater Treatment Facilities and its pertinent systems dated December 15, 2009 (the "Agreement"), is made effective on the 1<sup>st</sup> day of January, 2013, by and between City of Fayetteville, Arkansas, acting by and through its Mayor (hereinafter "City of Fayetteville") and CH2M HILL Engineers, Inc., (hereinafter "CH2M HILL")

**NOW THEREFORE**, the City and CH2M HILL hereby amend the Agreement as follows:

1. Appendix A is deleted in its entirety and replaced with the attached Appendix A.
2. Appendix B is attached for informational purposes only.
3. Appendix C is attached for informational purposes only.
4. Appendix D is deleted in its entirety and replaced with the attached Appendix D.
5. Appendix E is deleted in its entirety and replaced with the attached Appendix E.
6. Appendix F is deleted in its entirety and replaced with the attached Appendix F.
7. Appendix G is deleted in its entirety and replaced with the attached Appendix. G.
8. Appendix H is deleted in its entirety and replaced with the attached Appendix H.
9. Appendix J is hereby added.

This Amendment No. 3, together with the Agreement, constitutes the entire agreement between the Parties and supersedes all prior oral and written understandings with respect to the subject matter set forth herein. Unless specifically stated all other terms and conditions of the Agreement shall remain in full force and effect. Neither this Amendment nor the Agreement may be modified except in writing signed by an authorized representative of the Parties.



The Parties, intending to be legally bound, indicate their approval of the Amendment by their signatures below.

Officer have made and executed this Agreement as of the day and year first above written.

CH2M HILL ENGINEERS, INC.

CITY OF FAYETTEVILLE, ARKANSAS

By: \_\_\_\_\_  
Name: Natalie L. Eldredge  
Title: Senior Designated Manager  
Date: \_\_\_\_\_

By: \_\_\_\_\_  
Name: Lioneld Jordan, Mayor  
Title: Mayor  
Date: \_\_\_\_\_

ATTEST:

By: \_\_\_\_\_  
Name: Sondra Smith  
Title: City Clerk  
Date: \_\_\_\_\_

**Appendix A**

**LIST OF APPENDICES**

Appendix A – List of Appendices

Appendix B – Definitions

Appendix C – Scope of Services

Appendix D – Compensation for Services

Appendix E – Location of Project

Appendix F – Environmental Permits and Project Characteristics

Appendix G – Industrial Waste Discharges and Monitoring Program

Appendix H – Vehicle and Mobile Equipment Description (Rolling Stock)

Appendix I – Base Fee Adjustment

Appendix J - Lake Sequoyah Dredging Project

## **Appendix B**

### **DEFINITIONS**

- B.1 “Adequate Nutrients” means plant influent nitrogen, phosphorus and iron contents proportional to BOD<sub>5</sub> in the ratio of five (5) parts nitrogen, one (1) part phosphorus, and one half (0.5) part iron for each one hundred (100) parts BOD<sub>5</sub>.
- B.2 “Base Fee” means all costs within the scope of the contract, on an annual basis, including direct costs, labor, utilities, and other allocated costs.
- B.3 “Biologically Toxic Substances” means any substance or combination of substances contained in the plant influent in sufficiently high concentrations so as to interfere with the biological processes necessary for the removal of the organic and chemical constituents of the wastewater required to meet the discharge requirements of City of Fayetteville’s NPDES permit. Biologically toxic substances include but are not limited to heavy metals, phenols, cyanides, pesticides, and herbicides.
- B.4 “Capital Expenditures” means any expenditures for (1) the purchase of new equipment or facility items that cost more than Ten Thousand Dollars (\$10,000); or (2) major repairs which significantly extend equipment or facility service life and cost more than Ten Thousand Dollars (\$10,000); or (3) expenditures that are planned, non-routine and budgeted by City of Fayetteville.
- B.5 “Cost” means the total of all costs determined on an accrual basis in accordance with generally accepted accounting principles including but not limited to direct labor, insurance, labor overhead, chemicals, materials, supplies, utilities, equipment, maintenance, repair, and outside services.
- B.6 “Electrical Evaluation” will be limited to amperage draws, winding resistance measurements, thermographic evaluations, and current and voltage imbalance.
- B.7 “Fixed Asset” means any tangible property that has a value of Five Thousand Dollars (\$5,000) or more and is depreciable. This excludes the repair/replacement parts that are components of a greater fixed asset.
- B.8 “Maintenance” means the cost of those routine and/or repetitive activities required or recommended by the equipment or facility manufacturer or CH2M HILL to maximize the service life of the equipment, vehicles, and facilities as listed in Appendix E.
- B.9 “Out of scope” services will include “capital expenditures” (definition B.2 of this Appendix), added or modified regulatory requirements (that are not contained in the applicable permits), changes to improve efficiency and/or generate income, or other services not described in the contract and requested by the City of Fayetteville. These services shall be performed as stated in Appendix C. Should “Out of Scope Services” become a permanent and ongoing requirement, CH2M HILL will submit a change of scope request within a reasonable amount of time in accordance with Paragraph 1.6 of the Agreement.
- B.10 “Project” means all equipment, vehicles, grounds and facilities described in Appendix E and where appropriate, the management, operations and maintenance of such.
- B.11 “Repairs” means the cost of those non-routine/non-repetitive activities required for operational continuity, safety, and performance generally due to failure or to avert a failure of the equipment, sewer, vehicle, or facility or some component thereof; cost less than ten thousand dollars

(\$10,000); and are not included in definition B.2 of this Appendix. "Repairs" exclude cost of repair parts caused by storm damage to the supervisory control and data acquisition (SCADA) system.



## Appendix C

### SCOPE OF SERVICES

#### **C.1 SCOPE OF SERVICES – CH2M HILL**

- C.1.1 Perform professional services in connection with the Project as hereinafter stated.
- C.1.2 Operate and maintain all facilities over a 24-hour per day, 7-day per week period, under full service contract operations and maintenance. Operations may be performed with on site staff and/or remote monitoring/on-call services for all or portions of this time.
- C.1.3 Within the design capacity and capability of the Project, manage, operate, and maintain the Project so that effluent discharged from the Project meets the requirements specified in Appendix F.
- C.1.4 Operate and maintain the present Industrial Pretreatment Program including all monitoring, inspections, sampling, testing, reporting, and record keeping as described in Appendix G. Results of all industrial sampling and testing shall be made available to City of Fayetteville as requested.
- C.1.5 Provide all Maintenance for the Project. Document as required to continue existing maintenance program and to provide City of Fayetteville requested reporting, including but not limited to updated preventative maintenance schedules. City of Fayetteville shall have full access to preventative maintenance records.
- C.1.6 Pay all costs incurred within the scope of normal Project operations as defined in this Agreement.
- C.1.7 Staff the Project with a minimum of three (3) Arkansas Class IV Wastewater licensed operators.
- C.1.8 Prepare all NPDES permit reports, letters, or other correspondence, and submit these to City of Fayetteville for signature and approval. Transmittal to appropriate agencies shall be done by CH2M HILL, except for electronic reporting via NETDMR. Any fines levied because of late reports as a result of CH2M HILL's failure to complete and allow sufficient time for City of Fayetteville's signature and transmittal shall be paid by CH2M HILL. Submittal to the City of Fayetteville by the 15<sup>th</sup> of the month following the reporting period shall be considered timely.
- C.1.9 Provide for proper disposal of screening, scum, grit, and biosolids in compliance with permit and regulatory requirements, as long as a suitable location for such disposal is reasonably available. Should regulations and/or disposal/application options significantly change, projected costs will be revised by mutual agreement.
- C.1.10 Provide all manufacturers' warranties on new equipment purchased by the City of Fayetteville and assist the City of Fayetteville in enforcing existing equipment warranties and guarantees.
- C.1.11 Be responsible for all laboratory testing and sampling presently required by the NPDES permits, stormwater permits, "no discharge" permits, and other related requirements.
- C.1.12 Provide an inventory of vehicles and equipment (rolling stock) that are being used at the Project at the beginning of each contract year.
- C.1.13 Provide twenty four (24) hour per day access to Project for City of Fayetteville's personnel. Visits may be made at any time by any of City of Fayetteville's employees so designated by City of

Fayetteville's representative. Keys for Project shall be provided to City of Fayetteville by CH2M HILL. All visitors to the Project shall comply with CH2M HILL's operating and safety procedures.

- C.1.14 Provide for the maintenance of existing City of Fayetteville rolling stock such as dump trucks, tractors, and trailers that are necessary for the operations and maintenance of the facilities.
- C.1.15 Provide training for personnel in areas of operation, maintenance, safety, supervisory skills, laboratory, and energy management. Continue the current project safety program with updates as necessary.
- C.1.16 Provide computerized maintenance, process control, and laboratory management systems.
- C.1.17 Comply with the requirements of City of Fayetteville regarding affirmative action provisions for minority hiring.
- C.1.18 Provide City of Fayetteville with a full accounting of all expenditures at intervals and in sufficient detail as may be determined by City of Fayetteville and assist City of Fayetteville in preparation of annual operating budgets. City of Fayetteville shall be allowed to conduct or have conducted audits of all accounting records related to the direct contract operations of this Agreement at times to be determined by City of Fayetteville.
- C.1.19 Provide City of Fayetteville with full documentation that preventative maintenance is being performed on all City of Fayetteville equipment in accordance with manufacturer's recommendations at intervals and in sufficient detail as may be determined by City of Fayetteville. Maintenance program shall include documentation of corrective and preventive maintenance and a spare parts inventory.
- C.1.20 Provide for repairs as described in the Appendix B.5.
- C.1.21 Maintain the SCADA system as described in Appendix E, to include ongoing updates and upgrades of the software and hardware to ensure operational continuity and in accordance with initiatives as agreed upon by the City of Fayetteville and CH2M HILL.
- C.1.22 Verify the capacity and efficiency of each sewer lift station once a year.
- C.1.23 Provide recommendations for Capital Improvements Program (CIP) with a schedule for improvements and expenditures as requested by the City of Fayetteville. A five (5) year schedule will be presented for all capital improvements and ten (10) year projections will be made for major improvements. These recommendations will be based on requirements determined from facility operations and does not include detailed engineering studies. In addition, CH2M HILL will prepare the required forms and documentation required during budget and capital improvements budget preparation time each year. Except for the improvements requiring an engineering study, the following will be included for each project:
- Improvement needed
  - Justification of improvements
  - Cost of improvements
  - Any projected increase or decrease in O&M costs created by the CIP
  - Proposed expenditure schedule
  - Proposed capital recovery schedule
  - Impact of early termination

- C.1.24 Perform other services that are related to but not part of the Scope of Services upon written notification by City of Fayetteville. Such services will be invoiced to City of Fayetteville at CH2M HILL's cost plus eighteen percent (18%).
- C.1.25 At the direction of the City of Fayetteville, CH2M HILL is authorized to act in emergency situations outside this Scope of Services, at CH2M HILL's discretion. The costs related to emergency services are not included in the compensation set forth in this Agreement. CH2M HILL will notify City of Fayetteville as soon as reasonably possible, and shall be compensated by City of Fayetteville for any such emergency work at CH2M HILL's costs for the emergency work plus twenty-two percent (22%).
- C.1.26 Provide City of Fayetteville with oral and written reports as requested.
- C.1.27 Operate and maintain all existing wastewater lift station facilities including buildings, grounds, backup power generators, and certain other appurtenances within the site fenced area. However, maintenance of inlet and outlet pipeworks shall terminate at the wall of lift station. Should the City of Fayetteville add in excess of three (3) additional lift stations, from the prior contract year's number of sites, a corresponding change of scope will be negotiated.
- C.1.28 Conduct annual electrical evaluations of electrical units of 25 horsepower or more which operate at supply voltages of 480V or less to ground.
- C.1.29 CH2M HILL will comply with present federal, state, and local laws in performing their obligations under the terms of this Agreement. CH2M HILL and City of Fayetteville will work cooperatively regarding the application and impact of potential changes in law, including the potential cost impact on the scope of work, and mutually revise this Agreement as applicable.
- C.1.30 Coordinate and schedule the use of training rooms at both wastewater treatment facilities.
- C.1.31 Conduct community outreach and education activities including cooperative efforts with the University of Arkansas as appropriate.
- C.1.32 Maintain compliance with other existing environmental permits as described in Appendix F.
- C.1.33 Maintain the industrial surcharge program and provide for monitoring and control of septage deliveries, as provided for in the City of Fayetteville's Code of Ordinances, Discharge and Pretreatment Regulations.
- C.1.34 The parties contemplate that minor design/engineering services may be provided by CH2M HILL from time to time. The scope and compensation for such services shall be mutually negotiated by the parties prior to the commencement of work.
- C.1.35 Operate and maintain the ongoing nutrient removal efforts at the City of Fayetteville's Biosolids Management Site, including managing harvesting and marketing the hay produced on the site. Biosolids Management Site maintenance shall also include compliance with the current "no discharge" permit.
- C.1.36 Operate and maintain existing onsite power generators at all existing sites, including maintaining compliance with off-peak power rate structure monitoring and generation requirements.
- C.1.37 Operate and maintain the biosolids drying operation, which includes 6 solar houses and a thermal biosolids dryer.

- C.1.38 Coordinate the marketing and/or disposal of the dried biosolids produced from the drying operations as appropriate.
- C.1.39 Coordinate the application of alum sludge from Beaver Water District and invoicing for the services as appropriate.
- C.1.40 Check the condition of and replace the odor canisters that are part of the air release valves in the collection system, as needed. The mechanical condition of these valves will be maintained by the Fayetteville Water and Sewer Division.

**C.2 SCOPE OF SERVICES – CITY OF FAYETTEVILLE**

- C.2.1 Provide for all Capital Expenditures except for the Projects that City of Fayetteville may authorize CH2M HILL to implement subject to mutually agreeable terms and conditions of repayment.
- C.2.2 Maintain all existing and necessary Project warranties, guarantees, easements, permits, and licenses that have been granted to City of Fayetteville with the proviso that CH2M HILL remains primarily responsible to ensure that the wastewater plants are efficiently, properly and professionally operated so that they will not suffer a loss of permits or licenses.
- C.2.3 Pay all property or other taxes or franchise fees associated with the Project. This excludes taxes to be borne by CH2M HILL for equipment owned by CH2M HILL.
- C.2.4 May provide CH2M HILL within a reasonable time after request any piece of City of Fayetteville's heavy equipment, subject to availability, so that CH2M HILL may fulfill its obligations under this Agreement in the most cost-effective manner.
- C.2.5 Provide all licenses for vehicles used in connection with the Project.
- C.2.6 Provide for CH2M HILL's use all vehicles and equipment presently in use at the Project, including the vehicles described in Appendix H.
- C.2.7 Pay for all wastewater lift station utilities, with the exception of electricity.
- C.2.8 Pay for all gasoline, diesel, and propane for backup power generators and all rolling stock provided by City of Fayetteville, except for the biosolids semi-tractors.
- C.2.9 Pay for all regulatory fees.

## Appendix D

### COMPENSATION FOR SERVICES

- 4.1 CH2M HILL estimates that Base Fee for services, on an annual basis, under this Agreement for 2013 shall be **\$7,224,875**. Details of said cost are shown in D.4 below. The Base Fee shall be negotiated each year. Should City of Fayetteville and CH2M HILL fail to agree, the Base Fee will be determined by the application of the Base Fee adjustment formula shown in Appendix I. Upon each contract year renegotiation, CH2M HILL shall continue to invoice City of Fayetteville at the previous amount until the new contract year price is agreed upon. Upon written notice, agreement between the parties as to the new contract year Base Fee, CH2M HILL shall issue an invoice retroactively adjusting the previous Base Fee amount. Should the actual expenditures exceed the total estimated annual expenditures by more than Twenty Thousand Dollars (\$20,000), in any year of this Agreement, specific approval will be obtained from the City of Fayetteville prior to CH2M HILL incurring additional costs.
- 4.2 An administrative fee of fifteen percent (15%) will be added to personnel services and ten percent (10%) to all other direct costs excluding electricity. An annual fixed management fee of \$125,402 shall be billed in equal monthly installments and adjusted annually in relation to the Base Fee.
- 4.3 In order to provide an incentive for CH2M HILL to operate in a manner that will result in actual costs below estimated cost, City of Fayetteville will pay CH2M HILL an additional fee when actual costs are below estimated cost. Said fee will be twelve and one half percent (12.5%) of the amount of actual cost are below estimated cost.
- 4.4 **Cost Detail** - The annualized estimated costs for calendar year 2013 are listed in Table D-1.

**Table D-1, Cost Detail**

Category Description	Wastewater Division Administration & SCADA	Noland WWTP O&M (incl. land application site)	West Side WWTP O&M (incl. wetlands mitigation site)	Lab & Industrial Pretreatment Program	Lift Station Maintenance	Totals
Direct Labor	\$ 534,186	\$ 1,031,997	\$ 456,430	\$ 296,669	\$ 136,548	\$ 2,455,830
Labor Markup, 15%	\$ 80,128	\$ 154,800	\$ 68,465	\$ 44,500	\$ 20,482	\$ 368,375
Direct Expense	\$ 740,140	\$ 1,549,284	\$ 278,095	\$ 118,947	\$ 227,043	\$ 2,913,509
Expense Markup, 10%	\$ 74,014	\$ 154,928	\$ 27,809	\$ 11,895	\$ 22,704	\$ 291,350
Electricity		\$ 465,041	\$ 334,316		\$ 271,052	\$ 1,070,409
Fixed Fee	\$ 125,402					\$ 125,402
Totals	\$ 1,553,870	\$ 3,356,050	\$ 1,165,115	\$ 472,011	\$ 677,829	\$ 7,224,875

**Appendix E**

**LOCATION OF PROJECT**

E.1 CH2M HILL agrees to provide the services necessary for the management, operation and maintenance of the following:

E.2 All equipment, vehicles, grounds and facilities now existing within the present property boundaries of or being used to operate the City of Fayetteville's Noland Wastewater Treatment Plant located at:

1400 North Fox Hunter Road  
 Fayetteville, Arkansas 72701

E.3 All equipment, vehicles, grounds and facilities now existing within the present property boundaries of or being used to operate the City of Fayetteville's West Side Wastewater Treatment Plant located at:

15 South Broyles Avenue  
 Fayetteville, Arkansas 72704

E.4 All equipment, grounds, and facilities now existing within the present property boundaries of wastewater lift stations described as follows:

<b>SCADA NODE</b>	<b>LOCATION</b>	<b>Generator</b>	<b>Site Maintenance Only</b>
WW1	978 E Zion Rd (Lowe's - Zion PS)	YES	
WW2	3500 E Mission Blvd (Timbercrest PS)	YES	
WW4	691 W Poplar St (Poplar PS - ABANDONED)		YES
WW5	3896 N Gregg Ave (Gregg Ave PS)	YES	
WW6	3021 N Old Wire Rd (Old Wire PS)		
WW7	2065 N Sunshine Rd (Hamestring PS)	YES	
WW8	729 W North Street (North Street PS - ABANDONED)		YES
WW9	1336 N Porter Rd (Porter Rd PS)		
WW10	716 N Futrall Dr (Futrall Dr PS)	YES	
WW11	4412 W 6th Street (Farmington East PS - ABANDONED)		YES
WW12	571 N Double Springs Road (Farmington West PS)	YES	
WW13	878 S Dead Horse Mountain Rd (Stonebridge PS)	YES	
WW14	1820 S Armstrong Ave (Industrial Park PS)	YES	
WW16	516 W Ernest Lancaster Dr (Airport North PS)	YES	
WW18	202 N Sandy (Greenland PS)		
WW19	5716 E Norman Murphy Rd (Mally Wagnon PS)	YES	
WW20	3212 N Highway 112 - (Trucker's Drive PS - ABANDONED)		YES
WW22	630 N Double Springs Rd (Owl Creek PS)	YES	

SCADA NODE	LOCATION	Generator	Site Maintenance Only
WW23	440 E Fairway Ln (Masters PS)		
WW24	265 W Ernest Lancaster Dr (Airport East PS)	YES	
WW25	551 W Aster Ave (Willow West PS - Farmington)	YES	
WW27	1031 River Meadows Dr (Stonebridge Meadow Phase I PS)	YES	
WW28	1603 Plantation Ave (Heritage Village PS)	YES	
WW29	390 N Cato Springs Rd (Bohannon PS - Greenland)		
WW32	478 N Durango Place (Silverthorne PS)	YES	
WW33	4644 N Crossover Rd (Stonewood PS - Copper Creek)	YES	
WW34	4572 S School Ave (Airport South PS)	YES	
WW35	3083 W 6th St (Lowe's - 6th St PS)	YES	
WW36	1642 N Willowbrook Dr (Skylar Place PS)	YES	
WW37	3848 W Edgewater Dr (Clabber Creek PS - ABANDONED)		YES
WW38	3710 E Zion Rd (Copper Creek Phase II PS)	YES	
WW39	2392 N Kenswick Ave (Crofton Manner PS)	YES	
WW40	1811 S Cherry Hills Dr (Stone Bridge Meadow Phase II PS)	YES	
WW41	1608 S Springlake Dr (Crescent Lake PS)	YES	
WW43	196 S Woodsprings (Timber Trails PS)		
WW44	10 Dot Tipton Rd (Legacy Pointe Phase 4 PS)		
WW45	4451 N Waterside Ct (Timberlake Office Park PS)	YES	
WW46	3788 E Spyglass Hill Dr (Stonebridge Meadows Phase V PS)	YES	
WW47	3601 E Albright Rd (Embry Acres PS)	YES	
WW48	2435 S Dead Horse Mountain Rd (McDonald PS)	YES	
WW49	3393 E Goff Farm Rd (Meadows PS)	YES	
WW52	485 N Broyles Ave (Broyles Ave PS)	YES	
WW53	1396 Zion Rd (Office Park PS)	YES	

- E.5 All equipment, grounds, and facilities now existing within the present property boundaries of or being used to operate the City of Fayetteville's Biosolids Management Site located east of the Noland Wastewater Treatment Plant across the White River.
- E.6 All equipment, grounds, and facilities associated with or being used to complete routine O&M activities for the City of Fayetteville's Mitigated Wetlands Site now existing within the present property boundaries located north of the West Side Wastewater Treatment Plant. The service includes limited herbicide application and site monitoring but excludes burning.



E.7 The potable water SCADA system at the following locations:

SCADA NODE	LOCATION	DESCRIPTION
W1	215 W 24th St (South Mountain)	Pump Station
W2	844 N Crossover Rd (Hyland Park)	Pump Station
W4	1016 E Ash St	Pump Station
W5	707 E Rogers Dr	Pump Station
W6	456 E Baxter Ln	Ground Storage Tank (2 each)
W7	707 E Rogers Dr	Ground Storage Tank (2 each)
W8	133 N Sang Ave	Elevated Storage Tank
W9	1170 E South Skyline Dr	Elevated Storage Tank (Mt. Sequoyah)
W10	1044 E Township Rd	Elevated Storage Tank
W11	3280 W Judge Cummins Rd	Ground Storage Tank (2 ea) (Kessler Mountain)
W12	7001 E Mission (Highway 45 Valve	Pressure-Reducing Valve Station)
W13	1589 Fire Tower Road (Goshen)	Pump Station and Ground Storage Tank
W14	17301 Lake Sequoyah Rd (Round Mtn)	Pump Station
W15	14360 Round Mt Comm Church Rd	Stand Pipe County Rd #55 (Round Mountain)
W16	22032 Fire Tower Rd County Rd 4343	Stand Pipe (Benson Mountain)
W17	3265 N Gulley Rd	Elevated Storage Tank
W18	3788 N Gulley Rd	Pump Station
W19	3370 S Coach Rd	Pump Station
W20	2098 Woodcliff Rd (Springdale)	Surge Tank
W21	2210 N Old Wire Rd	Valve
W22	2800 N Old Missouri Rd	Flow Meter
W23	3385 N Par Ct	Valve
W24	3023 E Joyce Blvd	Valve
W25	2567 E Robinson (Springdale)	Valve
W27	17385 Blue Springs Rd (Goshen)	Pump Station
W28	17970 Lake Sequoyah Rd	Pump Station
W29	Beaver Water District	SCADA Interface
W30	1195 N. Canterbury Rd (Canterbury Tank)	Elevated Storage Tank
W31	2903 E. Flagstone Cir (Stonemountain)	Pump Station
WSOPC	2435 S Industrial Dr	Water & Sewer Ops Center
MTROB	12141 Ed Edwards Rd	Mt. Robinson Tower Site

E.8 Installation of the necessary Remote Terminal Units (RTUs) and equipment to acquire flow information from the collection system via SCADA. Flow monitoring devices (up to 17 remote locations) are scheduled to be installed by the City's Water and Sewer Division.

E.9 Responsible for the maintenance of Mt. Robinson Tower Site, excluding the road; which includes mowing and maintenance of the backup power generator, building, ground, and collision lamps. Perform annual inspection of guy wire and visual inspection of the tower.

E.10 Provision and maintenance of RTUs at the following sites located in the City of Elkins, Arkansas:

<b>SCADA NODE</b>	<b>LOCATION</b>	<b>DESCRIPTION</b>
EW1		Lift Station
EW1		Ground Storage Tank

E.11 Maintenance of the of the odor control system associated with the following lift stations:

<b>LOCATION</b>	<b># OF CANISTERS</b>
LS #6 - 3021 N Old Wire Rd (Old Wire)	4
LS #7 - 2065 N Sunshine Rd (Hamestring)	7
LS #12 - 571 N Double Springs Road (Farmington West)	9
LS #22 - 630 N Double Springs Rd (Owl Creek)	2
LS #52 - 485 N Broyles Ave (Broyles Ave)	2

**Appendix F**

**ENVIRONMENTAL PERMITS AND PROJECT CHARACTERISTICS**

F.1 CH2M HILL will operate Project so that effluent will meet the requirement of NPDES permit No. AR0020010 and AR0050288. CH2M HILL shall be responsible for meeting the effluent quality requirements of City of Fayetteville's NPDES permit unless one or more of the following occurs:

- The Project influent does not contain Adequate Nutrients to support operation of Project biological processes;
- Contains Biologically Toxic Substances which cannot be removed by the existing process and facilities;

The influent flow, influent BOD<sub>5</sub>, and/or suspended solids exceeds the Project design parameters which are:

	Noland WWTP		West Side WWTP	
	Annual Average	Maximum Monthly Average	Annual Average	Maximum Monthly Average
Flow (MGD)	11.2	16.9	10.0	17.8
BOD (lbs/d)	26,370	27,960	14,595	18,853
TSS (lbs/d)	20,620	22,210	14,595	18,853

F.2 In the event any one of the Project influent characteristics, suspended solids, BOD<sub>5</sub>, or flow, exceeds the parameters listed above, CH2M HILL shall return the plant effluent to the characteristics required by the NPDES permit in accordance with the following schedule after Project influent characteristics return to within design parameters.

Characteristics Exceeding Listed Parameters By	Recovery Period Maximum
10% or Less	5 days
> 10% but < 20%	10 days
20% and Above	30 days

Notwithstanding the above schedule if the failure to meet effluent quality limitations is caused by the presence of Biologically Toxic Substances or the lack of Adequate Nutrients in the influent, then CH2M HILL will have a thirty (30) day recovery period after the influent is free from said substances or contains Adequate Nutrients.

F.3 CH2M HILL shall not be responsible for fines or legal action as a result of discharge violations within the period that influent exceeds design parameters, does not contain Adequate Nutrients, contains Biologically Toxic Substances (that exceed process inhibiting levels or creates concentrations exceeding application or discharge limitations), and the subsequent recovery period.

F.5 The estimate Costs for services under this Agreement are based upon the following Project

characteristics:

Annual Average	Noland WWTP	West Side WWTP
Flow (MGD)	6.2	6.3
BOD (lbs/d)	13,568	9,895
TSS (lbs/d)	11,019	11,564

The above characteristics are the actual twelve (12) months average prior to the date services are first provided under this Agreement. Any change of 10 percent (10%) or more in any of these characteristics, based upon a twelve (12) month moving average, may constitute a change in scope.

F.6 The current applicable environmental permits are as follows:

Permit	AFIN No.	Permit No.	Expiration Date
NPDES - Noland	72-00102	AR0020010	05/31/11
NPDES - West Side	72-01033	AR0050288	11/30/10
No Discharge Permit - Noland	72-00829	4748-WR-2	12/31/13
No Discharge Permit - West Side	72-01033	5028-W	06/30/14
Air - Hamestring	72-01873	2179-A	N/A
Air - West Side	72-01033	2178-A	N/A
Stormwater No Exposure Certification (NEC) - Noland	72-00102	Tracking No. ARR00C377	06/30/14
Stormwater No Exposure Certification (NEC) - West Side	72-01033	Tracking No. ARR000390	06/30/14

**Appendix G**

**INDUSTRIAL WASTE DISCHARGES AND MONITORING PROGRAM**

- G.1 CH2M HILL shall: Administer the Industrial Pretreatment Program in accordance with 40 CFR 403. Administration shall include:
  - G.1.1 Maintain the industrial waste sampling and analysis program for pretreatment and surcharge, as described in G.3.
  - G.1.2 Monitor the compliance status of the current Significant Industrial Users (SIU's) through sampling, analysis, inspection, and record reviews. Recommend appropriate enforcement action to City of Fayetteville.
  - G.1.3 Receive, review and act upon reports and notification from industrial users.
  - G.1.4 Prepare notice of violations and other enforcement documentation for City of Fayetteville signature in accordance with the Enforcement Response Plan in the State approved Industrial Pretreatment Program.
  - G.1.5 Track, determine, and publish industrial users in significant noncompliance.
  - G.1.6 Draft new, revised, and renewal industrial waste discharge permits for the SIU's for City of Fayetteville signature.
  - G.1.7 Conduct an Industrial Waste Survey periodically to identify new, or significant, industrial users in Fayetteville and in cities with which Fayetteville has inter-jurisdictional agreements for waste treatment.
  - G.1.8 Assist City of Fayetteville with review and revision of local limits, the sewer use ordinances, the pretreatment program, and inter-jurisdictional agreements.
  - G.1.9 Prepare for City of Fayetteville signature and submit the Industrial Pretreatment annual report.
  - G.1.10 Maintain all industrial monitoring records for at least three (3) years.
  - G.1.11 Maintain open communication with the SIU's.
  - G.1.12 Keep City of Fayetteville informed of pretreatment activities and changes in regulatory requirements.
  
- G.2 Significant costs due to new or changed Federal, State or local regulations shall cause a change of contract scope.
  
- G.3 Industrial Waste Dischargers and Monitoring Program in City of Fayetteville, AR:

Industry	Parameters Analyzed
Ayrshire Electronics, LLC 1101 S. Beechwood Fayetteville, AR 72701	Copper, lead, zinc
Custom Powder Coating Services, Inc. 1629 W. Farmington St. Fayetteville, AR 72701	Cadmium, chromium, copper, lead, nickel, silver, zinc, cyanide

Industry	Parameters Analyzed
Elkhart Products Corporation 3265 Highway 71 South Fayetteville, AR 72701	Chromium, copper, lead, nickel, zinc, oil & grease
Hiland Dairy Company 301 E. 15 <sup>th</sup> Street Fayetteville, AR 72701	Biochemical oxygen demand, total suspended solids, phosphorus, pH, oil & grease
Marshalltown Tools 2200 Industrial Drive Fayetteville, AR 72701	Cadmium, chromium, copper, lead, nickel, silver, zinc, cyanide
Pinnacle Foods Corporation 1100 W, 15 <sup>th</sup> Street Fayetteville, AR 72701	Biochemical oxygen demand, total suspended solids, phosphorus, pH, oil & grease
Superior Industries International Arkansas, LLC 1901 Borick Drive Fayetteville, AR 72701	Cadmium, chromium, copper, lead, nickel, silver, zinc, cyanide
Tyson Foods, Inc. 2615 S. School Fayetteville, AR 72701	Biochemical oxygen demand, total suspended solids, phosphorus, pH, oil & grease

**Appendix H**

***VEHICLE AND MOBILE EQUIPMENT DESCRIPTION (ROLLING STOCK)***

<b>Unit #</b>	<b>Unit Description</b>	<b>Location</b>	<b>Year</b>
320	Ford F350 Super Duty/Crane, Crew Cab	West Side	1999
324	Ford F350 Super Duty/Crane, Reg. Cab	Paul R Noland	1999
325	Ford F350 Super Duty, Reg. Cab	Paul R Noland	2000
339	Ford F-350, Flatbed	Biosolids Management Site	2002
340	Ford F-350	Biosolids Management Site	2002
551	Ford 3930 Tractor Brushhog	Biosolids Management Site	1995
564	Ford/New Holland 8160 Load Tractor	Biosolids Management Site	1999
566	Ford/New Holland LS55 Lawn Tractor	Biosolids Management Site	1999
570	New Holland 8670 Tractor	Biosolids Management Site	2000
581	New Holland TS100A Front End Loader	Biosolids Management Site	2004
589	New Holland 1412 Discbine Mower Conditioner	Biosolids Management Site	2005
695	Bobcat Skidsteer Loader	Biosolids Management Site	2011
696	Caterpillar 420E Backhoe	Biosolids Management Site	2012
727	Dump Truck	Paul R Noland	1995
741	Mack Tractor	Biosolids Management Site	1996
751	Sterling LT9500 Truck	West Side	2006
755	Kenworth T800 Semi Tractor	Paul R Noland	2000
766	Kenworth T800 Semi Tractor	Biosolids Management Site	2011
768	Kenworth T470 (Spreader)	Biosolids Management Site	2012
770	Kenworth T800 Semi Tractor	Biosolids Management Site	2013
806	Case 1150G Bulldozer	Biosolids Management Site	1995
818	Caterpillar P5000LP Forklift	West Side	2008
927	Parker 24' Gooseneck Trailer	Biosolids Management Site	1991
959	Bush Hog 2620 Cutter	Biosolids Management Site	1995
966	P.J. Trailer, 18FT	Biosolids Management Site	1996
969	LO-Boy 25T-36FT Trailer	Biosolids Management Site	1996
988	Hesston Wheel Rake	Biosolids Management Site	1998
994	20KW Generator (Mt. Robinson)	Paul R Noland	1998
1092	Ford Explorer XLT	Paul R Noland	2002
2103	Ford 4X4 F150 Extended Cab	West Side	2006
2156	Chevy Colorado, 4X4	Paul R Noland	2012
3820	2006 Kawasaki Mule 4x4	West Side	2006
4318	2006 Kawasaki Mule 4x4	Paul R Noland	2006
5000	New Holland 1412 Discbine	Biosolids Management Site	2006
5001	John Deere 6615 Tractor	Biosolids Management Site	2007

**VEHICLE AND MOBILE EQUIPMENT DESCRIPTION (ROLLING STOCK)**

<b>Unit #</b>	<b>Unit Description</b>	<b>Location</b>	<b>Year</b>
5002	John Deere 6615 Tractor	Biosolids Management Site	2007
5003	New Holland 740 Round Baler	Biosolids Management Site	2007
5012	NHT6030	Biosolids Management Site	2009
5022	4X4 Tractor with Loader	Biosolids Management Site	2011
5023	H&S Spreader	Biosolids Management Site	2011
5030	New Holland H5920 Hay Rake	Biosolids Management Site	2011
5031	John Deere MOCO6030 Discbine	Biosolids Management Site	2012
5032	New Holland BR740 Round Baler	Biosolids Management Site	2012
5033	New Holland BB9060 Square Baler	Biosolids Management Site	2012
9025	Volvo Penta 400 KW Generator	Lift Station12	2001
9034	Yale 5000# Fork Lift	Paul R Noland	2002
9083	Lufkin ULD-38 Trailer	West Side	1999
9088	Lufkin ULD-38 Trailer	West Side	2006
9104	Lufkin ULD-38 Trailer	West Side	2004
9106	Lufkin ULD-38 Trailer	Paul R Noland	2004
9111	Clement Star-Lite Trailer	Paul R Noland	2009
9124	Thompson 6" Diesel Power Pump/Trailer	Paul R Noland	2009
9142	Aulick 42' Belted Trailer	Biosolids Management Site	2011
1050U	Ford Explorer	Paul R Noland	1999
2080U	Chevy Silverado 4X4 Extended Cab	Biosolids Management Site	2005
	Parkson Electronic Mole – Billy	Biosolids Management Site	2011
	Parkson Electronic Mole – Cricket	Biosolids Management Site	2011
	Parkson Electronic Mole – Goofy	Biosolids Management Site	2011
	Parkson Electronic Mole – Jurgens	Biosolids Management Site	2011
	Parkson Electronic Mole – Tiny Tim	Biosolids Management Site	2011
	Parkson Electronic Mole – Trick	Biosolids Management Site	2011
	Portable Generator for LS	Paul R Noland	2005



## Appendix I

### BASE FEE ADJUSTMENT

- I.1 Electrical costs will be adjusted by actual increases from power supplier.
- I.2 The Base Fee adjustment formula is as follows:

$$ABF = BF \times (1 + AF)$$

Where:

- BF = Base Fee specified in Appendix D
- ABF = Adjusted Base Fee
- AF = Adjustment Factor as determined by the formula:

$$AF = .5 (ECI + CPI)$$

- ECI = The twelve month percent change (from the third quarter of the prior year to the third quarter in the current year) in the Employment Cost Index for Total Compensation for Civilian Workers, Not Seasonally Adjusted as published by U. S. Department of Labor, Bureau of Labor Statistics in the Detailed Report Series ID: CIU101000000000A.
- CPI = The twelve month percent change (from October of the prior year to October of the current year) in the Consumer Price Index for All Urban Consumers, Not Seasonally Adjusted as published by U.S. Department of Labor, Bureau of Labor Statistics in the CPI Detailed Report Series Id: CUUR000SA0.

## Appendix J

### LAKE SEQUOYAH DREDGING PROJECT – SCOPE OF WORK

Lake Sequoyah has accumulated approximately 5 billion pounds of sediment over the past 50 years. Nearly 1% or 4 million pounds of the sediment is phosphorus. The accumulated sediment decreases the lake capacity as a sediment and phosphorus trap as well as severely curtails the recreation uses of the lake.

At the request of the City of Fayetteville, CH2M HILL staff planned for a large scale dredging pilot on Lake Sequoyah in 2012. CH2M HILL developed a work plan for this pilot study in May and the Arkansas Department of Environmental Quality issued a short term authorization for this activity in early July. The purpose of this study was to develop a sustainable approach for a full scale dredging project that will meet all regulatory and implementation objectives. The dredging pilot study began in September, which involved pumping of several hundred thousand gallons of lake sediment and capturing several hundred cubic yards of dried sediment.

The CH2M HILL O&M budget for 2013 includes funding for the initiation of the full scale dredging of Lake Sequoyah. Primary objectives for the additional scope include beginning the process of developing the necessary processes and permitting of the of the full scale dredging project as listed below:

- Develop a Work Plan and a Quality Assurance Project Plan for the dredging project
- Develop a Health and Safety Work Plan
- Begin the process to obtain proper authorization(s) and/or permit(s)
- Establish contracts for equipment rental and necessary sub-contract agreements, make recommendations for capital purchases, or an appropriate combination of these activities
- Implement and/or construct selected sedimentation separation facilities
- Establish a preliminary means of sediment disposal or sale

The dredging project is expected to remove most of the accumulated sediment from the lake over the next 10-15 years, but will likely continue in a reduced fashion beyond that horizon as new sediment is trapped within the lake over that same time period.