City of Fayetteville, Arkansas



A. 9 Hoskyn, Barton & Wyatt, Inc. 113 West Mountain S**Rege** 1 of 38 Fayetteville, AR 72701 479-575-83 TDD -479-521-1316

Text File File Number: 2014-0417

Agenda Date: 10/7/2014

Version: 1

Status: Agenda Ready

File Type: Resolution

In Control: City Council

Agenda Number: C. 3

A RESOLUTION TO AUTHORIZE A CONTRACT WITH GRUBBS, HOSKYN, BARTON & WYATT, INC. FOR MATERIALS TESTING AND CONSTRUCTION OBSERVATION SERVICES ON THE SPRING STREET PARKING DECK PROJECT IN AN AMOUNT NOT TO EXCEED \$120,000.00

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

<u>Section 1:</u> That the City Council of the City of Fayetteville, Arkansas hereby authorizes a contract with Grubbs, Hoskyn, Barton & Wyatt, Inc. for materials testing and construction observation services on the Spring Street Parking Deck Project in an amount not to exceed \$120,000.00.

City of Fayetteville Staff Review Form

2014-0417

Legistar File ID

10/7/2014

City Council Meeting Date - Agenda Item Only

N/A for Non-Agenda Item

Submitted By

Chris Brown

9/23/2014

у

Submitted Date

Engineering / Development Services Department

Division / Department

Action Recommendation:

Approval of a Contract with Grubbs Hoskyn, Barton, and Wyatt, Inc. for Materials Testing and Construction Observation Services on the Spring Street Parking Deck

4560.9560.5314.00	Parking De	ck Project	t Expenses
Account Number		Fund	
11028.1203	Entertainn Facilit	nent Distri xy/Constru	-
Project Number	P	roject Title	9
Budgeted Item? Yes	Current Budget	\$	5,003,175.00
	Funds Obligated	\$	524,388.47
	Current Balance	\$	4,478,786.53
Does item have a cost? Yes	Item Cost	\$	120,000.00
Budget Adjustment Attached? No	Budget Adjustment	\$	-
	Remaining Budget	\$	4,358,786.53

Original Contract Number:

Approval Date:

Comments:

MEETING OF OCTOBER 7, 2014

то:	Mayor and City Council
THRU:	Don Marr, Chief of Staff Jeremy Pate, Development Services Director
FROM:	Chris Brown, City Engineer
DATE:	September 19, 2014

SUBJECT: Approval of a Contract with Grubbs Hoskyn, Barton, and Wyatt, Inc. for Materials Testing and Construction Observation Services on the Spring Street Parking Deck

RECOMMENDATION:

Staff recommends approval of a contract with Grubbs, Hoskyn, Barton, and Wyatt, Inc. in the amount of \$120,000 for materials testing and construction observation services on the Spring Street Parking Deck.

BACKGROUND:

The City of Fayetteville is constructing a parking deck in the downtown area/entertainment district to relieve current parking shortfalls and allow for increased parking demand in the area. The project is now ready to move forward to construction, and the City is in need of services to ensure that the materials and construction of the deck meet the requirements of the plans and specifications. Grubb, Hoskyn, Barton, and Wyatt, Inc. (GHBW) was selected by a City Committee as the most qualified firm to provide quality control testing and inspection firm on the project.

DISCUSSION:

Under this contract, GHBW will provide materials testing of soils and concrete, and will provide inspection related to excavation and site grading, drilled pier foundations, post tensioned concrete, and structural steel. These inspections and associated reports are required by City Ordinance and by the International Building Code, and will help insure that the deck and liner buildings are constructed in accordance with the plans and specifications.

BUDGET/STAFF IMPACT:

Funding for this portion of the project is coming from parking revenue bond proceeds.

Attachments:

Contract with Grubbs, Hoskyn, Barton, and Wyatt



A. 9 Hoskyn, Barton & WyattβInc. Springdale, Arkan **Bage #cof** 38 341 West County Line Road 72764 (479) 756-5999 FAX (479) 756-1749

September 11, 2014 Proposal No. SP14-061

City of Fayetteville Engineering Division 125 W. Mountain Street Fayetteville, Arkansas 72701

Attn: Mr. Chris Brown, P.E. City Engineer

SUBJECT: CONSTRUCTION MATERIALS TESTING SERVICES SPRING STREET PARKING DECK FAYETTEVILLE, ARKANSAS

Dear Mr. Brown:

We are pleased to submit this proposal and cost estimate for providing construction observation and materials testing services for the above referenced project. This proposal and cost estimate have been prepared based on our review of the project plans and specifications, the preliminary construction schedule dated July 23, 2014, on-going conversations with the Structural Engineers Mr. Jeff Hanson of Carl Walker, Inc. and Mr. David Clement of Garver, and our experience with local projects of similar size and scope. GHBW submitted a geotechnical study for the project on May 24, 2013 (GHBW Report No. 13-002).

We understand the project consists of a new 3-level, 236 space parking deck to be located at the northwest corner of Spring Street and School Avenue. The parking deck will be post-tensioned concrete with a slab-on-grade bottom floor. Liner buildings will be constructed on the north and south sides of the new deck. The North Liner Building will be a three-story steel-frame structure with a total of 16,406 sq ft. The South Liner Building will be a single-story structure with a plan footprint area of 1,590 sq ft. Structural building loads will be supported by straight-shaft drilled piers socketed into sandstone bedrock. Mass excavation will be required for the project. Numerous cast-in-place concrete below-grade walls and retaining walls are planned to retain cut slopes.

Grubbs, Hoskyn, Barton & Wyatt, Inc. has a long history of providing quality geotechnical and materials testing services in Arkansas and surrounding states. A brief Statement of Qualifications is enclosed as Attachment A for your review. Our experience encompasses several nearby projects of similar scope including the Harmon Avenue and Garland Avenue Parking decks and Vol Walker Hall addition on the University of Arkansas Fayetteville Campus, as well as the 21c Museum Hotel and parking garage and Midtown Center and parking garage in downtown Bentonville. Our laboratory is certified by the Arkansas Highway and Transportation Department (AHTD) and the American Association of State Highway and Transportation Officials (AASHTO). Copies of these certifications are enclosed as Attachment B.

Scope of Services

We have based our scope of services on our review of the project plans and specifications, preliminary scheduling information, our experience with projects of similar size and scope, and discussions with the design team. Our scope of services is expected to include but not limited to

observation and testing related to excavation and site grading, drilled pier installation, foundation installation, reinforced concrete, post-tensioned concrete and structural steel building components. Limited testing of masonry construction and floor flatness of concrete slab-on-grade is also expected. Our proposed scope of services also includes observation of flood testing for the parking garage slabs, as well as coordination of outside laboratory testing services as required for testing of air content of hardened concrete cores and testing of concrete waterproofing sealer. Specific tests and inspections are listed within the cost estimate detail (Attachment D) for reference.

Personnel and Scheduling

We understand testing and observation services are expected for a 12 month period from November 2014 through October 2015. For cost estimation, we have assumed that continuous fulltime observation will be provided for a period of 15 days for drilled pier installation. Although fulltime observation is not expected, time intensive observation and testing services are anticipated during construction of post-tensioned building elements. The remainder of our testing and inspection services are expected to be provided on an on-call basis, with frequent visits for concrete testing and reinforcing steel placement anticipated. Structural steel inspection is expected to be performed on a per floor basis. We have also assumed visits by the Project Engineer and Principal Engineer will be periodically required for meetings, coordination and consultation. For this project, we plan to provide the following personnel and hourly rates as follows:

CMT Technician	\$55.00/hour
Technician Supervisor	\$65.00/hour
Structural Steel Inspector (CWI)	\$75.00/hour
Project Engineer	\$95.00/hour
Principal Engineer	\$125.00/hour
Report Preparation and Reproduction	\$45.00/hour

Hourly rates include equipment for field testing, i.e. nuclear density machines, concrete testing equipment, and concrete cylinder molds. Hourly rates also apply to travel time to the job site plus \$0.50 per mile for mileage.

Resumes for key personnel with which we plan to staff the project are enclosed as Attachment C.

Cost Estimate

Based on our understanding of our scope of work, the construction schedule and estimated material quantities, the cost of observation and materials testing is estimated on the order of \$120,000. This estimate includes work performed on-site, engineering services, laboratory testing, and reporting costs. A cost estimate detail that outlines the assumptions used to arrive at the cost estimate is enclosed as Attachment D for your reference.

The cost estimate may be considered not to exceed for the scope of services and assumptions outlined in the cost estimate detail. We will not exceed the stated amount without prior authorization. Any additional charges for services provided will be based on our Standard Schedules of Fees 40.01, 42.07, and 46.02, enclosed as Attachment E.

We appreciate the opportunity to submit this proposal and cost estimate and hope we can work with you on this project. We are confident that we have the expertise and resources to provide these services in a competent and timely manner. If you have questions about the proposal and cost estimate or if tasks should be added or deleted from the scope of services, please call. If the scope of work and cost estimate are acceptable, please return one signed copy as authorization.

Sincerely,

GRUBBS, HOSKYN, BARTON & WYATT, INC.

A. Bennett, P.E. ample t. Prøject Engineer

Subra T. Bhat, Ph.D., P.E. / Principal/Manger, Springdale Office

Attachment A:	Statement of Qualifications	
Attachment B:	Laboratory Certifications	
Attachment C:	Resumes	
Attachment D:	Cost Estimate Detail	
Attachment E:	Schedule 40.01 (April 2008)	
	Schedule 42.07 (April 2014)	
	Schedule 46.02 (June 2014)	

Copies Submitted:	City o	fFayetteville	
	Attn:	Mr. Chris Brown, P.E.	(email)
		City Engineer	
	Attn:	Mr. Jeremy Pate	(email)
		Development Services Director	

KAB/STB

Date

Signature

ATTACHMENT A

GRUBBS, HOSKYN, BARTON & WYATT, INC. GEOTECHNICAL and MATERIALS TESTING CONSULTANTS

STATEMENT OF QUALIFICATIONS

Introduction

Grubbs, Hoskyn, Barton & Wyatt, Inc. is a geotechnical consulting firm located in Little Rock (Headquarters) and Springdale, Arkansas. The firm was established as Grubbs Consulting Engineers, Inc. in 1964 in Fayetteville, Arkansas and moved to Little Rock in 1966. In addition to the main office in Little Rock, Grubbs, Hoskyn, Barton & Wyatt also has a branch office in Springdale, Arkansas.

The practice of **Grubbs, Hoskyn, Barton & Wyatt, Inc.** can be divided into four principal phases: (1) geotechnical engineering analyses and design; (2) field instrumentation, measurement and laboratory testing; (3) subsurface exploration; and (4) engineering services for construction. The firm includes over 60 persons, including engineers; geologists; soils, laboratory, and materials technicians; drillers; and support personnel. The engineering group includes seven (7) Registered Professional Engineers and two (2) Engineer Interns.

Specialized Experience

Grubbs, Hoskyn, Barton & Wyatt, Inc. has performed geotechnical studies and presented recommendations for design and construction of fossil and nuclear power plants, high rise office buildings, hotels, warehouses, schools, major highway and railroad river bridges, earth dams, retaining walls, levees, revetments, drainage structures, pumping stations, proposed and existing landfill sites, hazardous waste sites including Superfund sites, and port facilities. The project sites have been located in a variety of geologic regions including the Mississippi Embayment, Ozark Mountains, Ouachita Mountains, Gulf Coastal Plain, and Loessial terrace areas.

Engineering studies for design of structures on or adjacent to rivers and lakes have included analysis of local and ground scour potential, development of river channel and bank stabilization and analysis of deep pile and pier foundation systems. Projects involving bridge design have required engineering studies for large slurry pier and dredged caisson foundations and load testing and selection of construction specifications and procedures. Marine projects include studies on the Arkansas, Red, Ouachita, and Mississippi Rivers.

Investigations, studies and analyses frequently required detailed evaluation of groundwater conditions, soil permeability and development of data for evaluating underseepage potential and the design of seepage controls including slurry walls and dewatering systems. The studies of groundwater related problems have involved the installation of both temporary and permanent piezometers, groundwater monitoring wells, and various types of in-situ permeability tests. Evaluation of the potential for seepage in rock strata has involved the performance of pressure and flow tests using open and double packer methods.

Studies have also required analysis and monitoring of slope stability in fills and deep cuts for highway embankment and for emergency spillway areas and development of recommendations for treatment of potentially unstable soil or rock zones. Borrow area evaluations have consisted of both test pit and sample boring investigation, determination of engineering properties and development of fill placement and compaction criteria for both homogeneous and zoned embankments of soil and rock fill design. Particular attention has been given to developing methods of using available soil and rock materials from reservoir borrow areas and emergency spillway cuts in the embankments to reduce the project cost.

Subsurface Exploration

To perform the necessary data gathering for evaluation of soil and geological conditions, our firm has an equipment complement which includes one Failing 1500, two Mobile B-53's, one SIMCO 2400, one all-terrain vehicle-mounted Mobile B-53 and one all-terrain vehicle-mounted Hilyard Super rig. Special sampling and field testing has also been accomplished using downhole vane shear apparatus and cone penetrometers. Rock exploration capabilities include standard NX and NQ_{wl} coring capabilities.

Our exploration equipment is suitable for mounting on marine equipment. We have used tugboats with barges moored with four-point anchor spread, spud barges, and sectional barges. We have drilled in major streams, such as the Mississippi River and Arkansas River, lakes including Beaver Lake and Lake Hamilton, and smaller bodies of water.

Laboratory Testing

Grubbs, Hoskyn, Barton & Wyatt, Inc. laboratory operations use state-of-the-art equipment and methods for performing routine and specialized tests on soil and rock. Testing capabilities include: water content, specific gravity, density, Atterberg Limits, grain-size from sieve analyses and hydrometer, permeability using constant-head and falling-head and flexible-wall apparatus, shrinkage tests, maximum and minimum density tests, pin-hole dispersion, resistivity, pH and chemical analyses, triaxial shear and direct shear tests, consolidation tests and Standard and Modified Proctor moisture-density tests. Our Little Rock laboratory facility is periodically inspected by AASHTO, the US Army Corps of Engineers, Center for Training Transportation Professionals (CCTP), and CCRL. Laboratory certification information is attached. Foundation and earthwork construction is characterized by the presence of a calculated risk that soil and groundwater conditions have been fully revealed by the original foundation investigation. This risk derives from the practical necessity of basing interpretations and design conclusions on a limited sampling of the earth. The services of **Grubbs**, **Hoskyn**, **Barton & Wyatt**, **Inc.** extend into the construction phase of projects to aid in minimizing such risks.

By observing various phases of excavation and foundation construction, our field representative is able to recognize both the expected and unexpected variations in subsurface conditions, to interpret their significance, and to make prompt recommendations for action when needed.

Other construction services provided by **Grubbs**, **Hoskyn**, **Barton & Wyatt**, **Inc.** include advice and assistance in the selection of fill materials; quality control of compacted fills; inspection during construction of pile, piers, mat, and footing foundations; quality control and testing of concrete, structural steel and asphalt. Often, for large projects, it is desirable to establish an on-site laboratory so that quality control (QC) testing can more readily be coordinated with construction surveillance.

ATTACHMENT B

American Association of State Highway and Transportation Officials

AASHTO Accreditation Program Certificate of Accreditation

This is to signify that

Grubbs, Hoskyn, Barton & Wyatt, Inc.

in Springdale, Arkansas

has demonstrated proficiency for the testing of construction materials and has conformed to the minimum requirements established in AASHTO R 18 set forth by the AASHTO Highway Subcommittee on Materials (HSOM).

The scope of accreditation can be viewed on the AAP Directory of Accredited Laboratories on www.amrl.net.

Bud Wright, Executive Director



T

Moe Jamshidi, AASHTO HSOM Chair



A. 9 Hoskyn, Barton & Wyatt, Inc. Page 13 of 38

SAP



Laboratory No. 905700 Center for Training _____ Transportation Professionals Laboratory Certification Program



Expiration Date: 11/19/14

This document asserts that

Grubbs, Hoskyn, Barton, & Wyatt, Inc. Springdale Laboratory Springdale, AR

is certified to perform quality control testing under the specifications shown below, for a time period to expire on the date shown above.

AASHTO

- T 2 Sampling Aggregates T 11 Washing T 27 Sieve Analysis
- T 84 Fine Agg. Sp. Gr.
- T 85 Coarse Agg. Sp. Gr
- T 248 Splitting/Quartering
- T 255 Moisture Content

Aggregate

Stace



Laboratory No. 905700

Center for Training Transportation Professionals

Laboratory Certification Program



Expiration Date: 11/19/14

This document asserts that

Grubbs, Hoskyn, Barton, & Wyatt, Inc. Springdale Laboratory Springdale, AR

is certified to perform quality control testing under the specifications shown below, for a time period to expire on the date shown above.

Portland Cement Concrete

AASHTO

- M 201 Tanks/Moist Rooms M 205 Single Use Molds R 60 Sampling Concrete **Organic Impurities** T 21
- Comp. Strength T 22
- T 23 Cylinders

AASHTO

- T 119 Slump
- T 121 Density
- T 152 Air Content
- T 231 Capping Cylinders
- T 309 Temperature

A. 9 Hoskyn, Barton & Wyatt, Inc. Page 15 of 38

SOP



Laboratory No. 905700 Center for Training Transportation Professionals

Laboratory Certification Program



Expiration Date: 11/19/14

This document asserts that

Grubbs, Hoskyn, Barton, & Wyatt, Inc. Springdale Laboratory Springdale, AR

is certified to perform quality control testing under the specifications shown below, for a time period to expire on the date shown above.

Soil

AASHTO

- T 89 Liquid Limit
- T 90 Plastic Limit
- T 99 Standard Proctor

AASHTO

T 180 Modified Proctor T 265 Moisture Content T 310 Nuclear Density

Stacy & Director, OTT

ATTACHMENT C

341 West County Line Road, Springdale, Arkansas, 72209 Phone: 479-756-5999 Fax: 479-756-1749

SUBRA T. BHAT, Ph. D, P.E., Principal/ Manager of Springdale Office

EDUCATION: Bachelor of Science, Civil Engineering, Karnataka Regional Engineering College, Surathkal, India, 1984 Master of Science, Geotechnical Engineering, Indian Institute of Science, Bangalore, India, 1987 Ph.D, Geotechnical Engineering, Purdue University, West Lafayette, Indiana, 1995

REGISTRATION: Professional Engineer: Arkansas, Ohio, Indiana, Oklahoma

AFFILIATION: American Society of Civil Engineers, National Society of Professional Engineers

EMPLOYMENT SUMMARY:

2004-present Principal/ Manager of Springdale Office Grubbs, Hoskyn, Barton & Wyatt, Inc.

2002-2004 Manager, Springdale Office Grubbs, Hoskyn, Barton & Wyatt, Inc.

1999 – 2002 *Senior Project Engineer* Grubbs, Hoskyn, Barton & Wyatt, Inc.

1997 – 1999 *Project Engineer* Solar Testing Laboratories, Inc., Cleveland, Ohio

1996 – 1997 Visiting Assistant Professor Purdue University, West Lafayette, Indiana

1987 - 1992 *Scientist* National Institute of Oceanography, Goa, India

1985 *Lecturer in Civil Engineering* Karnataka Regional Engineering College, Surathkal

EXPERIENCE AND BACKGROUND:

The professional experience of Dr. Bhat includes more than fifteen (15) years of research, teaching and geotechnical engineering consulting practice. Among the projects that Dr. Bhat has been involved are soil and foundation investigations for a variety of industrial and residential structures, airport structures, elevated water tanks, parking decks, power plants, roadways, highway bridges, waste water treatment plants, water treatment plants, levees, slope stability analysis and failure investigation of embankments and other structures.

Among the projects Dr. Bhat has been involved include William J. Clinton Presidential Center project at Little Rock and numerous highway projects in Arkansas including I-40 bridges, I-30 bridges, failure investigation of US Hwy 70 bridge over Lake Hamilton at Hot Springs and US Hwy 67 relocation project,

SUBRA T. BHAT, Ph. D, P.E., Principal/ Manager of Springdale Office

Page 2

Perry Road Interchange in Rogers, Pleasant Grove Road overpass in Rogers, South Quad Parking deck at Fayetteville, West Side Waste Water Treatment Plant in Fayetteville, East Collector System in Fayetteville, Carol Ann Cross Dam in Fort Smith, Beaver Water Expansion Project in Lowell, 9-story Legacy Building (condominium) in Fayetteville, 17-story East Square hotel/condominiums in Fayetteville and numerous school, roadway and bridge projects, airport projects, and commercial and residential development projects in northwest Arkansas.

Kyle A. Bennett, P.E. Project Engineer

EDUCATION:	BSCE, University of Arkansas, 2001 MSCE (Geotechnical), University of Arkansas, 2005	
REGISTRATION:	Registered Professional Engineer, Arkansas	
AFFILIATIONS:	Chi Epsilon National Civil Engineering Honor Fraternity	
EMPLOYMENT SUN	MMARY:	 2005 – Present Project Engineer Grubbs, Hoskyn, Barton & Wyatt, Inc., Springdale, AR 2004 – 2005 Staff Engineer Grubbs, Hoskyn, Barton & Wyatt, Inc., Springdale, AR 2002 – 2004 Research Assistant Major Professor: Dr. Norman D. Dennis, PhD., P.E. University of Arkansas, Fayetteville, AR

GENERAL EXPERIENCE AND BACKGROUND:

Mr. Bennett's duties have included coordination and scheduling of geotechnical field exploration, evaluation of site conditions, examination of subsurface soil samples and assignment of pertinent laboratory testing, completion of geotechnical engineering analysis and design for foundation, retaining wall, below-grade wall, embankment and pavement recommendations, slope stability analyses, and site construction feasibility studies. Mr. Bennett is responsible for preparation of both large- and small- scale project Geotechnical reports and for developing proposals for Geotechnical studies. Field assignments have included evaluation of undercut requirements, field verification of foundation bearing capacity, field verification of subgrade stability, and drilled pier inspection.

In his capacity as a research assistant at the University of Arkansas, Mr. Bennett designed and assembled a system to evaluate the resilient modulii of pavement systems using the Spectral Analysis of Surface Waves (SASW) technique. Testing of the assembled system included planning and coordination of field-testing at 11 sites throughout the state of Arkansas in conjunction with the Arkansas Highway and Transportation Department.

TECHNICAL PAPERS:

"Determination of Resilient Modulii of Flexible Pavement Systems Using Spectral Analysis of Surface Waves" unpublished MSCE Thesis, University of Arkansas, Fayetteville, Arkansas, 2005.

TALLEY FAULKNER - Laboratory Supervisor / Radiation Safety Officer / IT Specialist / Senior Engineering Asst.

Certifications & Training:

- Radiation Safety Officer Training
- Gauge Safety Training
- Hazmat

.

- Basic Aggregates CTTP
- ACI Concrete Field Testing
- Soils Testing Technician CTTP
- ACI Concrete Strength Training Technician

Employment Summary:

- 02/13 Present: Laboratory Supervisor / Radiation Safety Officer / IT Specialist / Senior Engineering Asst.
 - Grubbs, Hoskyn, Barton & Wyatt, Inc. 10/07 - 02/13: Radiation Safety Officer / IT Specialist / Senior Engineering Asst.
- Grubbs, Hoskyn, Barton & Wyatt, Inc.
- 08/06 10/07: IT Specialist / Engineering Assistant
- Grubbs, Hoskyn, Barton & Wyatt, Inc.
- 07/05 07/06: Customer Service Representative Arvest Bank
- 06/02 07/05: General Labor
 - Sara Lee Bakery

Grubbs, Hoskyn, Barton & Wyatt, Inc. - Springdale, Arkansas Office

Duties as Laboratory Supervisor include maintaining all records related to laboratory equipment and calibration, ensuring all in-house and outside calibrations are performed in a timely manner and technician training is current. Duties as Radiation Safety Officer include maintaining all records related to safety/operation of nuclear gauges, yearly leak tests, yearly verification of gauges, quarterly inventory and survey; Duties as Senior Engineering Assistant include reporting concrete break reports, communicating with clients regarding low breaks/etc., preparing boring logs and profiles using gINT and Autocad, maintaining all engineering report filing systems. Duties as IT Specialist include diagnosing and repairing workstation components, maintaining electronic filing backup and antivirus software, maintaining iphones and other smarthphone devices.

SID AMEDEE, SENIOR MATERIALS TECHNICIAN

TRAINING:	Asphalt mix design, 40 hours. University of Arkansas, Fayetteville, AR.	
	Nuclear Training #30393 – Troxler	
	Asphalt Plant Certification #21 Arkansas Highway Transportation Department.	
	Basic Aggregates Certification #1092 – CTTP Fayetteville.	
	Hot-Mix Technician #1092, 2001-CTTP	
	PCC Technician #1092, 2006 CTTP	
	Soils/ Aggregates Technician #1092, 2007 CTTP	
	National Swimming Pool Foundation CPO Registration #71-125764	
EDUCATION:	Warren Easton High School, Canal Street, New Orleans, LA Graduated – 1968	
	L.S.U.N.O., New Orleans, LA Attended – One year	

EMPLOYMENT:

1969-Feb 10, 1	972 U.S. Navy, NAS New Orleans, Belle Chasse, LA
	Structural Mechanic – Responsible for any structural damage to aircrafts. Checking and replacing worn tires, fuel lines, etc.
1972-1986	S.J. Amedee Oil, El Dorado, AR Owner/pumper/operator – Responsible for daily well checks, pulling wells and everything from book-keeping to road work.
April 1987 - Fe	 2001 Jet Asphalt & Rock Co. 1251 Smackover Highway, El Dorado, AR. Telephone: (870) 863-7801 Senior Lab Technician – Started as shovel hand and worked up to roller operator, low boy driver, speed operator on lay-down machine. Began as Lab assistant in 1990 and became certified in mix design, radiation by Troxler, and by the Arkansas Highway and Transportation Department as Plant Inspector. Later promoted to Senior Hot-Mix Asphalt Technician. I was

	responsible for all testing procedures in the lab, on the road as required by the A.H.T.D., logging equipment in and out, keeping a lab manual on all equipment, keeping plots on all test reports, ordering and trouble shooting of all equipment in the lab. I was also responsible for the training and performance of the lab assistants in the lab and on the road.
July 2001 – June 2002	Chapel Ridge Apt. Complex, 301 Morewood Road, El Dorado, AR Telephone: (870) 862-7900
	Maintenance Supervisor – Responsible for 72 units, clubhouse and swimming pool. Maintenance includes plumbing, electrical, carpentry, painting and floor repairs in all units. Swimming pool duties include being certified by American Pool Foundation (CPO) and keeping pool maintained to pass inspections by the Arkansas Health Department.
June 2002 – Feb 2004	Falk Plumbing Supply Company, 1709 W. Hillsboro, El Dorado, AR Telephone: (870) 862-3406
	Joined the Falk team as a counter salesman. This position enabled me to make contact with all the local plumbers and surrounding counties. Duties included inventory, stocking, opening and closing, making deposits and using the Eclipse System on the computer.
March 2004 – Sept 2004	4 City of El Dorado, 204 North West Ave., El Dorado, AR Telephone (870) 863-4244 Street Department
	Supervisor: Wes Slaughter Duties included: General road maintenance, driving city trucks to the appropriate locations, delivering supplies, some supervision of and helping crews with everyday maintenance.
Sept 2004 – Jan 2005	Willie's Oasis, 13810 Strong Hwy, Strong, AR Telephone: (870) 797-2042
	Liquor Store Supervisor: Toby Walden, Owner
	Duties included: counter sales, general maintenance, plumbing, structural
	repair, repair and maintenance of all machinery, cooling units, small engines, as well as forklift driving.
July 7, 2005 – Present	Grubbs, Hoskyn, Barton & Wyatt, Inc., 341 W. County Line Rd, Springdale, AR Telephone: (479) 756-5999
	Started my duties as a Field Technician II with CTTP certifications, #1092 and Troxler training #30393. Duties included testing concrete, making cylinders, running slumps, and testing for air content. Along with this testing,
	I also ran grout and mortar test with rebar inspections. Responsible for running field density test using a nuclear gauge and roller patterns on asphalt. Further duties included inspecting drill pier operations and reporting all the results to the engineer.

GRUBBS, HOSKYN, BARTON & WYATT, INC. 341 W. County Line Road Springdale, AR 72764 Phone: 479-756-5999

JOHNATHAN PARKER - CMT Technician / Technician Supervisor

Certifications & Training:

(CTTP #2900)

- Gauge Safety Training (Troxler)
- ACI Grade I
- Basic Aggregates
- Soils
- Ultrasonic Level II

Education: High School Diploma.

Employment Summary:

• 4/14 - Present: Field Technician Grubbs, Hoskyn, Barton & Wyatt, Inc.

Grubbs, Hoskyn, Barton & Wyatt, Inc. - Springdale, Arkansas Office

Duties include testing concrete, making cylinders, running slumps, and testing for air content, grout and mortar testing. Responsible for running field density test using a nuclear gauge and roller patterns on asphalt. Further duties include laboratory testing which includes Proctors, concrete cylinder breaks, gradation and soil classification tests. Mr. Parker has worked on various AHTD roadway projects and large scale developments.

• 1/10 - 4/14: Technician GTS, Inc.

GTS, Inc.

Duties included testing concrete, making cylinders, running slumps, and testing for air content, grout and mortar testing. Responsible for running field density test using a nuclear gauge and roller patterns on asphalt. Further duties include laboratory testing which includes Proctors, concrete cylinder breaks, gradation and soil classification tests. Also bid jobs and performed rebar inspection and undercut observations.

ATTACHMENT D

Grubbs, Hoskyn, Barton & Wyatt, Inc. Proposal No. SP14-061

Proof-Roll and Excavation Observation	
Principal: 2 visits/wk x 8 wks x \$125/hr	= \$2,000
Densities (Subgrade and Trench Backfill)	
CMT Senior Technician: 1.5 hr/visit x 1 visit/day x 40 days x \$55/hr	= \$3,300
Foundations	
Full Time Continuous Observation of Pier Installation (15 days)	
Project Engineer: 15 days x 10hr/day x \$95/hr	= \$14,250
Principal: 4 visits x 3 hrs/visit x \$125/hr	= \$1,500
Footing Bearing Capacity and Reinforcing Steel	
Principal: 1 visit/day x 20 days x 2 hrs/visit x \$125/hr	= \$5,000
Drilled Pier Concrete Placement	
CMT Technician: 1 pour/day x 2 hrs/pour x 15 days x \$55/hr	= \$1,650
Footing Concrete Placement	
CMT Technician: 1 pour/2 days x 20 days x 2 hrs/pour x \$55/hr	= \$1,100
CIP Walls	
Reinforcing Steel	
Principal: 1 visit/day x 20 days x 2hrs/visit x \$125/hr	= \$5,000
CIP Wall Concrete Placement	
CMT Technician: 1 pour/day x 20 days x 2 hrs/visit x \$55/hr	= \$2,200
Densities for Wall Backfill	
CMT Technician: 30 visits x 2 hrs/visit x \$55/hr	= \$3,300
North Liner Building	
Pre Pour Observation of Slab-on-Grade	
Principal: 1 visit/pour x 2 pours x 2 hrs/visit x \$125/hr	= \$500
Pre Pour Observation of Slab-on-Deck	
Technician Supervisor: 3 visits x 3 hrs/visit x \$75/hr	= \$675
Structural Steel	
CWI: 3 levels x 2 visits/level x 4 hrs/visit x \$75/hr	= \$1,800
Slab-on-Grade Concrete Placement	
CMT Technician: 2 pours x 4 hrs/visit x \$55/hr	= \$440
Slab-on-Deck Concrete Placement	
CMT Technician: 3 pours x 4 hrs/pour x \$55/hr	= \$660

Grubbs, Hoskyn, Barton & Wyatt, Inc. Proposal No. SP14-061	A. 9 September 19, 2014 & Wyatt, Inc. Attachment D Page 2 Attachment D Page 2
Masonry	
Observation of Masonry Construction and Reinforcing Steel	
Project Engineer: 8 visits x 2 hrs/visit x \$95/hr	= \$1,520
Grout and Mortar Sampling	
CMT Technician: 8 visits x 2 hr/visit x \$55/hr	= \$880
Floor Flatness	
South Liner Building (approx 2200 sq ft)	
Equipment Charge: \$0.03/sq ft x 2,200 sq ft	= \$66
Technician Supervisor: 2 visits x 3 hr/visit x \$65/hr	= \$390
Garage Structure	
Garage Slab-on-Grade	
Pre Pour Observation	
Project Engineer: 2 pours x 1 visit/pour x 2 hrs/visit x \$95/hr	= \$380
Concrete Placement	
CMT Technician: 2 pours x 2 CMT Techs x 4 hrs/pour x \$55/hr	= \$880
Post-Tension Pours	
5 Pours x \$5,555/pour (see below for cost breakdown per pour)	= \$27,775
Cost Breakdown Per PT Pour:	
Column Reinforcing Steel Observation	
Project Engineer: 2 visits x 2.5 hr/visit x \$95/hr	(\$475)
Column Concrete Placement	
CMT Technician: 2 visits x 2.5 hrs/visit x \$55/hr	(\$275)
Pre Pour Observation of Tendon and Reinforcing Steel Placement	
Principal: 8 hr x \$125/hr	(\$1,000)
Project Engineer: 8 hr x \$95/hr	(\$760)
PT Slab Concrete Placement	
2 CMT Technicians x 7 hrs x \$55/hr	(\$770)
Observation of Tendon Stressing	
Project Engineer: 10 hr x \$95/hr	(\$950)
Technician Supervisor: 10 hr x \$65/hr	(\$650)
PT Stressing Report	
Project Engineer: 3 hrs x \$95/hr	(\$285)

A. 9

Grubbs, Hoskyn, Barton & Wyatt, Inc. Proposal No. SP14-061	September 11, 2014 Page 2 Attachment D Page 3
Technician Supervisor: 6 hrs x \$65	(\$390)
<u>CIP Stairs</u>	
Pre Pour Observation	
Project Engineer: 2 visits x 2 hrs/visit x \$95/hr	= \$380
Concrete Placement	
CMT Technician: 2 visits x 2 hrs/visit x \$55/hr	= \$220
Flood Testing	
Field Observation	
Principal: 6 flood test x 1 visit/test x 3 hrs/test x \$125/hr	= \$2,250
Report Preparation of Flood Test Results	
Principal: 6 reports x 3 hrs/report x \$125/hr	= \$2,250
Laboratory	
Proctors and Soil Classification for Fill and Backfill	= \$1,000
125 Concrete sets x 6 breaks/set x \$10/break	= \$7,500
8 Grout sets x 3 breaks/set x \$10/break	= \$240
8 Mortar sets x 3 breaks/set x \$10/break	= \$240
Outside Laboratory Services	
Air Content on Hardened Concrete Cores (ASTM C457)	
7 tested cores (one per 15,000 sq ft) x \$750/test	= \$5,250
Waterproofing – Concrete Sealer Testing (NCHRP 244)	
3 tests estimated (1 per 55 gal drum) x \$900/test	= \$2,700
Trip Charge	
200 trips x 34 miles round trip x \$0.50/mile	= \$3,400
Meetings and Coordination	
Principal: 6 Meetings x 2 hr/meeting x \$125/hr	= \$1,500
Project Engineer: 6 Meetings x 2 hr/meeting x \$95/hr	= \$1,140
Report Preparation and Review	
Clerical Report Preparation: 2.5 hr/wk x 40 wks x \$45/hr	= \$4,500
Engineering Report Preparation: 1 hr/wk x 40 wks x \$95/hr	= \$3,800
Report Review and Consultation: 0.5 hr/wk x 40 wks x \$125/hr	= \$2,500

Total:	= \$114,136
Estimated Cost:	= \$120,000

A. 9 arton & Wyatt, Inc. J14 Page 27 of 38

ATTACHMENT E

STANDARD FEES AND GENERAL CONDITIONS FOR ENGINEERING AND TECHNICAL SERVICES

1. Client

Client, as used herein, is the entity who authorized performance of services by Grubbs, Hoskyn, Barton & Wyatt, Inc. and accepts responsibility for payment under the conditions stated herein.

2. Professional Services and Fees

- **2.1** Analysis, consultation and report preparation. Fees for our professional services are included in the attached proposal.
- **2.2 Reimbursable expenses.** Expenses other than salary costs that are directly attributable to performance of our professional services are billed as follows:
 - a) for report reproduction by our graphics department, charges equivalent to commercial rates for similar commercial service; schedule available upon request
 - **b**) for transportation in our company automobiles, \$0.50 per mile
 - c) for all other expenses, included but not limited to, authorized travel, sample shipment, subcontracts, consulting fees, long distance communications, outside reproduction, and mailing expense, cost plus 15 percent

3. General Conditions

3.1 On-site Responsibilities and Risks

- a) **Right-of-Entry.** Unless otherwise agreed, Client will furnish right-of-entry and obtain permits, as required, for us to perform the field work.
- b) Damage to Property. We will take reasonable precautions to minimize damage to land and underground property caused by our operations, but we have not included in our fee the cost of repairing such damage. If Client desires us to repair and/or pay for damages, we will undertake the repairs and add the cost to our fee.
- c) Toxic and Hazardous Materials. Client will provide us with all information within his possession of knowledge as to the potential occurrence of toxic or hazardous materials at the site being investigated. If unanticipated toxic or hazardous materials are encountered, we reserve the right to demobilize our field operations at Client's expense. Remobilization will proceed following consultation with our safety coordinator and Client's acceptance of proposed safety measures and fee adjustments.
- d) Utilities and Pipelines. While performing our field work, we will take reasonable precautions to avoid damage to subterranean and subaqueous structures, pipelines, and utilities. Client agrees to hold Grubbs, Hoskyn, Barton & Wyatt, Inc. and its officers, agents, employees, and subcontractors harmless for any damages to such structures, pipelines, and utilities which are not called to our attention and correctly shown on the plans furnished.

3.2 Warranty

- a) Services performed by Grubbs, Hoskyn, Barton & Wyatt, Inc. will be conducted in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions. No other warranty, either expressed or implied, is made or intended by our proposal, contract, or reports.
- b) Client acknowledges that conditions may vary from those encountered at the location where borings, surveys, or explorations are made and that our data, interpretations and recommendations are based solely on the information available to us. We will be responsible for our data, interpretations, and recommendations, but shall not be responsible for the interpretation by others of the information developed.

3.3 Liability

Our liability to Client for injury or damage to persons or property arising out of work performed for Client and for which legal liability may be found to rest upon us, other than for professional errors and omissions, will be limited to our general liability coverage. For any damage caused by an error, omission, or other professional negligence, our liability will be limited to a sum not to exceed \$50,000 or our fee less direct third-party costs, whichever is greater. In the event that Client does not wish to limit our professional liability to this sum, we agree to waive this limitation upon receiving Client's written request, and Client agrees to pay an additional consideration of 4 percent of our total fee or \$500, whichever is greater.

3.4 Invoices and Payment

Invoices will be submitted every four (4) weeks for services rendered. Payment is due upon presentation of our invoice and is past due thirty (30) days from invoice date. Payment of our invoice(s) is not contingent upon Client receiving payment from a third party. Client agrees to pay a finance charge of one percent (1%) per month (or the maximum rate allowable by law, whichever is less), on past due accounts. Any attorney's fees or other cost incurred in collecting a delinquent amount shall be paid by Client.

3.5 Samples

All samples of soil and rock will be discarded thirty (30) days after submission of our report, unless Client advises us otherwise. Upon request, we will deliver the samples in accordance with Client's instructions, charges collect, or will store them for an agreed charge.

3.6 Records

All pertinent records relating to services performed hereunder shall be retained for three (3) years after completion of the work. Client shall have access to the records at all reasonable times during said period.

4. Related Services

Additional services that are frequently required for support of our professional activities are normally provided by one of the technical divisions of Grubbs, Hoskyn, Barton & Wyatt, Inc. Applicable charges are given in one or more schedules of the following series:

- 4.1 Laboratory Testing Fees
- **4.2** Field Charges for Foundation Investigations
- **4.3** Rates for Construction Surveillance and Consultation

LABORATORY AND FIELD TESTING FEES

Test	t No.		Uni	t Price
1.	CEM	ENT TESTS	Quoted on H	Request
2.	AGG	REGATE TESTS		
	Grain 2.1. 2.2. 2.3. Prope 2.5. 2.6. 2.7. 2.8. 2.9. 2.10.	Size Tests Sieve analysis fine aggregate and soils, through #200 sieve, each sample . Percent passing a single sieve, each	\$ \$ \$ \$ \$ 	30.00 120.00 60.00 40.00 40.00 12.00 40.00 80.00
	2.11. 2.12.	Sand equivalent, each sample Flat and elongated particles, each sample (ASTM D4791)		
	<u>Abras</u> * 2.12.1 * 2.12.2 2.12.3 <u>Sound</u>	tion Los Angeles Machine (ASTM C 131), each sample Los Angeles Machine (ASTM C 535), each sample . Crushing and preparing sample, if required	\$ \$ \$	225.00 350.00 75.00
3.	CON	CRETE STRENGTH TESTS		
	3.1. 3.2. 3.3. <u>Beam</u>	rete, Mortar or Grout Compressive Strength Cylinder compressive strength test, each	\$ \$	10.00 10.00
	3.4. 3.5.	Beam flexural strength test, each		
		gth Estimate Schmidt concrete test hammer Windsor probe test, \$30.00 per location (probe costs) plus hourly rate	Quoted on F	Request
4.	CON	CRETE MIX DESIGNS		
	4.1. 4.2.	Compute mix design using previously determined aggregate properties, each Provide mix design/check contractors mix design by preparing trial batch mix using aggregate, admixtures, and cement	Engineer Hour	ly Rate
		furnished for use on project, each batch or each curve point	Technician Hour	ly Rate

GRI	UBBS, HO	SKYN, BARTON & WYATT, INC.	Schedule 42.07 (Apr	ge 33 of 38						
	4.3.	Confirmatory cylinders made in connection with mix design, each	\$	10.50						
		sts of aggregates, cement and admixtures to determine the basic physica arged separately.	l properties and suit	tability						
5.	COR	ING SERVICES	Ouoted on R	equest						
6.		CORE TESTS								
	6.1.	Capping and testing of cores (with sawing ends), each	\$	20.00						
7.	SOIL	AND BASE MATERIAL TESTS								
	18	ification and Index Tests	¢	5 00						
	7.1. 7.2.	Water content, per sample Liquid and plastic limits, per sample		5.00						
	1.2.		¢	40.00						
		7.2.1 Method B dry preparation								
	7.3.	7.2.2 Method B wet preparation Unit dry weight of sample								
	7.3.									
		Specific gravity								
	7.5.	Sieve analysis through #200 sieve, per sample								
	7.6.	Percent passing a single sieve, each								
	7.7.	Hydrometer test, each								
	7.8.	Double hydrometer, per sample								
	* 7.9.	Permeability of sand, constant head								
	* 7.10.	Permeability of silt or clay, falling head								
	* 7.11.	Permeability – Flexwall Test (undisturbed sample)								
	* 7.12.	Permeability – Flexwall Test (remolded sample)								
	* 7.13.	Laboratory soil resistivity								
	* 7.14.	pH								
	7.15.	Saw Cut Shelby Tube								
	11-11-11-11-11-11-11-11-11-11-11-11-11-	7.15.1. Shelby Tubes for permeability samples, each								
	7.16.	Preparation of sample or base material binder, each	\$	50.00						
	7.17.	Sample preparation for soil with admixture, including								
		admixtures and curing, per hour	\$	65.00						
		Compaction and Control Tests								
	7.18.	Optimum moisture and density relationship								
		7.18.1. Standard compaction effort, per sample	\$	120.00						
		7.18.2. Modified compaction effort, per sample	\$	140.00						
	7.19.	Laboratory relative density using vibratory table								
	7.20.	In-place density and moisture using nuclear equipmentIncluded I	n Hourly Technicia	n Rate						
	7.21.	Lime modification optimum (LMO)	Quoted on R	equest						
	7.22.	Sample preparation: soil mixtures and curing, per hour	\$	65.00						
		<u>gth Tests</u>	1)	170.00						
		California bearing ratio (CBR), per specimen (Proctor cost NOT includ	ea)\$	1/0.00						
	7.24.	Sample preparation: soil admixtures and curing for		~ ~ ~ ~ ~						
		compaction and strength tests, per hour								
	7.25.	Soil-cement or soil-lime tests								
	7.26.	Unconfined compression, soil								
	7.27.	Unconfined compression, rock (with saw cutting cost)	\$	45.00						

Volume Change Tests \$ 7.33. Consolidation \$ 250.00 * 7.34. Swell test, swell pressure and percent swell \$ 150.00 8. ASPHALTIC CONCRETE MIX DESIGNS * 8.1. Provide mix design using aggregates and asphalt furnished for use on project, Marshall Method \$ 25,00.00 * 8.2. Compute mix design using previously determined aggregate properties such as gradation, specific gravity, and other design factors, each Hourly Rate 9. ASPHALTIC CONCRETE TESTS 9.1. Molding test specimens, each specimen \$ 40.00 9.2. Determine Marshall stability and flow value, each specimen \$ 40.00 9.4. Maximum theoretical specific gravity \$ 60.00 9.5. Extraction (percent of bitumen and aggregate gradation) \$ 185.00 9.6. Laboratory density on field-cut specimen trimmed to size in laboratory density of asphalt course using nuclear equipment. Hourly Rate 10. MASONRY TESTS Masonry Compressive Strength \$ 10.00 * 10.3. Masonry grout compressive strength, each \$ 10.00 * 10.4. Masonry unit block strength, each \$ 340.00 * 10.5. Mix preparation and casting cubes per ASTM C-270 with flow test, each set (does not include strength test cost) \$		7.28. * 7.29. * 7.30. * 7.31. * 7.32. * 7.33.	Unconsolidated-undrained – triaxial Consolidated-undrained – triaxial Consolidated-drained – triaxial Consolidated-drained – direct shear Residual strength – direct shear Multi-stage test for triaxial or direct shear	Quoted on Request Quoted on Request \$ 200.00 \$ 300.00
 * 7.34. Swell test, swell pressure and percent swell				
 8. ASPHALTIC CONCRETE MIX DESIGNS * 8.1. Provide mix design using aggregates and asphalt furnished for use on project, Marshall Method. \$2,500.00 * 8.2. Compute mix design using previously determined aggregate properties such as gradation, specific gravity, and other design factors, each. Hourly Rate 9. ASPHALTIC CONCRETE TESTS 9.1. Molding test specimens, each specimen. \$40.00 9.2. Determine laboratory density or percent voids, each specimen. \$40.00 9.3. Determine laboratory density or percent voids, each specimen. \$40.00 9.4. Maximum theoretical specific gravity. \$60.00 9.5. Extraction (percent of bitumen and aggregate gradation) \$185.00 9.6. Laboratory density on field-cut specimen trimmed to size in laboratory density of asphalt course using nuclear equipment. Hourly Rate 10. MASONRY TESTS Masonry Compressive Strength 10.1. Mortar cube compressive strength, each. \$10.00 * 10.3. Masonry prism strength, each. \$10.00 * 10.4. Masonry unit block strength, each. \$10.5 Mix preparation and casting cubes per ASTM C-270 with flow test, each set (does not include strength test cost). \$120.00 				
 * 8.1. Provide mix design using aggregates and asphalt furnished for use on project, Marshall Method		* 7.34.	Swell test, swell pressure and percent swell	\$ 150.00
furnished for use on project, Marshall Method. \$2,500.00 * 8.2. Compute mix design using previously determined aggregate properties such as gradation, specific gravity, and other design factors, each. Hourly Rate 9. ASPHALTIC CONCRETE TESTS 9.1. Molding test specimens, each specimen \$ 40.00 9.2. Determine laboratory density or percent voids, each specimen \$ 20.00 9.3. Determine Marshall stability and flow value, each specimen \$ 40.00 9.4. Maximum theoretical specific gravity \$ 60.00 9.5. Extraction (percent of bitumen and aggregate gradation) \$ 185.00 9.6. Laboratory density on field-cut specimen trimmed to size in laboratory (field cutting of specimens are charged separately) \$ 20.00 9.7. In-place density of asphalt course using nuclear equipment. Hourly Rate 10. MASONRY TESTS \$10.00 *10.3. Masonry grout compressive strength, each. \$10.00 *10.3. Masonry prism strength, each. \$85.00 *10.4. Masonry Unit block strength, each. \$40.00 Masonry Mortar Mix Verification \$10.00 *10.5. Mix preparation and casting cubes per ASTM C-270 with flow test, each set (does not include strength test cost) </th <th>8.</th> <th>ASPH</th> <th>ALTIC CONCRETE MIX DESIGNS</th> <th></th>	8.	ASPH	ALTIC CONCRETE MIX DESIGNS	
furnished for use on project, Marshall Method \$2,500.00 * 8.2. Compute mix design using previously determined aggregate properties such as gradation, specific gravity, and other design factors, each Hourly Rate 9. ASPHALTIC CONCRETE TESTS 9.1. Molding test specimens, each specimen \$ 40.00 9.2. Determine laboratory density or percent voids, each specimen \$ 20.00 9.3. Determine Marshall stability and flow value, each specimen \$ 40.00 9.4. Maximum theoretical specific gravity \$ 60.00 9.5. Extraction (percent of bitumen and aggregate gradation) \$ 185.00 9.6. Laboratory density on field-cut specimen trimmed to size in laboratory (field cutting of specimens are charged separately) \$ 20.00 9.7. In-place density of asphalt course using nuclear equipment. Hourly Rate 10. MASONRY TESTS Masonry grout compressive strength, each \$10.00 * 10.3. Masonry prism strength, each \$85.00 * 10.4. Masonry Unit block strength, each \$40.00 Masonry Mortar Mix Verification \$10.00 * 10.5. Mix preparation and casting cubes per ASTM C-270 with flow test, each set (does not include strength test cost) \$120.00		* 8.1.	Provide mix design using aggregates and asphalt	
aggregate properties such as gradation, specific gravity, and other design factors, each. Hourly Rate 9. ASPHALTIC CONCRETE TESTS 9.1. Molding test specimens, each specimen \$ 40,00 9.2. Determine laboratory density or percent voids, each specimen \$ 20,00 9.3. Determine Marshall stability and flow value, each specimen \$ 40,00 9.4. Maximum theoretical specific gravity \$ 60,00 9.5. Extraction (percent of bitumen and aggregate gradation) \$ 185,00 9.6. Laboratory density on field-cut specimen trimmed to size in laboratory (field cutting of specimens are charged separately) \$ 20,00 9.7. In-place density of asphalt course using nuclear equipment Hourly Rate 10. MASONRY TESTS Masonry Compressive Strength \$10,00 * 10.3. Masonry prism strength, each. \$10,00 * 10.4. Masonry unit block strength, each. \$40,00 Masonry Mortar Mix Verification \$40,00 * 10.5. Mix preparation and casting cubes per ASTM C-270 with flow test, each set (does not include strength test cost) \$120,00			furnished for use on project, Marshall Method	\$2,500.00
and other design factors, each Hourly Rate 9. ASPHALTIC CONCRETE TESTS 9.1. Molding test specimens, each specimen \$ 40,00 9.2. Determine laboratory density or percent voids, each specimen \$ 20,00 9.3. Determine Marshall stability and flow value, each specimen \$ 40,00 9.4. Maximum theoretical specific gravity \$ 60,00 9.5. Extraction (percent of bitumen and aggregate gradation) \$ 185,00 9.6. Laboratory density on field-cut specimen trimmed to size in laboratory (field cutting of specimens are charged separately) \$ 20,00 9.7. In-place density of asphalt course using nuclear equipment. Hourly Rate 10. MASONRY TESTS Masonry Compressive Strength 10.1. 10.1. Mortar cube compressive strength, each \$10,00 10.2. Masonry grout compressive strength, each \$10,00 * 10.3. Masonry unit block strength, each \$40,00 Masonry Mortar Mix Verification \$40.00 \$40,00 * 10.4. Masonry unit block strength, each \$40,00 * 10.5. Mix preparation and casting cubes per ASTM C-270 with flow test, each set (does not include strength test cost) \$120,00		* 8.2.		
9. ASPHALTIC CONCRETE TESTS 9.1. Molding test specimens, each specimen \$ 40,00 9.2. Determine laboratory density or percent voids, each specimen \$ 20,00 9.3. Determine Marshall stability and flow value, each specimen \$ 40,00 9.4. Maximum theoretical specific gravity \$ 60,00 9.5. Extraction (percent of bitumen and aggregate gradation) \$ 185,00 9.6. Laboratory density on field-cut specimen trimmed to size in laboratory (field cutting of specimens are charged separately) \$ 20,00 9.7. In-place density of asphalt course using nuclear equipment Hourly Rate 10. MASONRY TESTS Masonry Compressive Strength \$10,00 10.1. Mortar cube compressive strength, each \$10,00 * 10.3. Masonry prism strength, each \$85,00 * 10.4. Masonry unit block strength, each \$40,00 Masonry Mortar Mix Verification \$40,00 * 10.5. Mix preparation and casting cubes per ASTM C-270 with flow test, each set (does not include strength test cost) \$120,00				
9.1. Molding test specimens, each specimen \$ 40.00 9.2. Determine laboratory density or percent voids, each specimen \$ 20.00 9.3. Determine Marshall stability and flow value, each specimen \$ 40.00 9.4. Maximum theoretical specific gravity \$ 60.00 9.5. Extraction (percent of bitumen and aggregate gradation) \$ 185.00 9.6. Laboratory density on field-cut specimen trimmed to size in laboratory (field cutting of specimens are charged separately) \$ 20.00 9.7. In-place density of asphalt course using nuclear equipment. Hourly Rate 10. MASONRY TESTS Masonry Compressive Strength 10.1. Mortar cube compressive strength, each. \$10.00 * 10.3. Masonry prism strength, each. \$10.00 * 10.4. Masonry unit block strength, each. \$40.00 * 10.5 Mix preparation and casting cubes per ASTM C-270 with flow test, each set (does not include strength test cost) \$120.00			and other design factors, each	Hourly Rate
9.2. Determine laboratory density or percent voids, each specimen \$ 20.00 9.3. Determine Marshall stability and flow value, each specimen \$ 40.00 9.4. Maximum theoretical specific gravity \$ 60.00 9.5. Extraction (percent of bitumen and aggregate gradation) \$ 185.00 9.6. Laboratory density on field-cut specimen trimmed to size in laboratory (field cutting of specimens are charged separately) \$ 20.00 9.7. In-place density of asphalt course using nuclear equipment. Hourly Rate 10. MASONRY TESTS Masonry Compressive Strength 10.1. Mortar cube compressive strength, each \$10.00 10.2. Masonry grout compressive strength, each \$10.00 * 10.3. Masonry prism strength, each \$10.00 * 10.4. Masonry unit block strength, each \$40.00 * 10.5 Mix preparation and casting cubes per ASTM C-270 with flow test, each set (does not include strength test cost) \$\$120.00	9.	ASPH	ALTIC CONCRETE TESTS	
9.3. Determine Marshall stability and flow value, each specimen \$ 40.00 9.4. Maximum theoretical specific gravity \$ 60.00 9.5. Extraction (percent of bitumen and aggregate gradation) \$ 185.00 9.6. Laboratory density on field-cut specimen trimmed to size in laboratory (field cutting of specimens are charged separately) \$ 20.00 9.7. In-place density of asphalt course using nuclear equipment. Hourly Rate 10. MASONRY TESTS Masonry Compressive Strength 10.1. Mortar cube compressive strength, each \$10.00 10.2. Masonry grout compressive strength, each \$10.00 * 10.3. Masonry prism strength, each \$10.00 * 10.4. Masonry unit block strength, each \$40.00 Masonry Mortar Mix Verification \$40.00 * 10.5 Mix preparation and casting cubes per ASTM C-270 with flow test, each set (does not include strength test cost) \$\$120.00		9.1.	Molding test specimens, each specimen	\$ 40.00
9.4. Maximum theoretical specific gravity \$ 60.00 9.5. Extraction (percent of bitumen and aggregate gradation) \$ 185.00 9.6. Laboratory density on field-cut specimen trimmed to size in \$ 20.00 9.7. In-place density of asphalt course using nuclear \$ 20.00 9.7. In-place density of asphalt course using nuclear \$ 10.00 10. MASONRY TESTS Masonry Compressive Strength 10.1. Mortar cube compressive strength, each \$10.00 10.2. Masonry grout compressive strength, each \$10.00 * 10.3. Masonry prism strength, each \$85.00 * 10.4. Masonry unit block strength, each \$40.00 Masonry Mortar Mix Verification \$40.00 * 10.5 Mix preparation and casting cubes per ASTM C-270 with flow test, each set (does not include strength test cost) \$120.00		9.2.	Determine laboratory density or percent voids, each specimen	\$ 20.00
 9.5. Extraction (percent of bitumen and aggregate gradation)				
 9.6. Laboratory density on field-cut specimen trimmed to size in laboratory (field cutting of specimens are charged separately)\$ 20.00 9.7. In-place density of asphalt course using nuclear equipment				
laboratory (field cutting of specimens are charged separately) \$ 20.00 9.7. In-place density of asphalt course using nuclear equipment. Hourly Rate 10. MASONRY TESTS Masonry Compressive Strength 10.1. Mortar cube compressive strength, each. \$10.00 10.2. Masonry grout compressive strength, each. \$10.00 * 10.3. Masonry prism strength, each. \$10.00 * 10.4. Masonry unit block strength, each. \$40.00 Masonry Mortar Mix Verification \$40.00 * 10.5 Mix preparation and casting cubes per ASTM C-270 with flow test, each set (does not include strength test cost) \$120.00				\$ 185.00
9.7. In-place density of asphalt course using nuclear equipment		9.6.	* *	
equipment		07		\$ 20.00
10. MASONRY TESTS <u>Masonry Compressive Strength</u> 10.1. Mortar cube compressive strength, each		9.7.		Hourly Rate
Masonry Compressive Strength 10.1. Mortar cube compressive strength, each	10	MAG		
10.1. Mortar cube compressive strength, each	10.	MASC	JNKY IESIS	
10.2. Masonry grout compressive strength, each				
 * 10.3. Masonry prism strength, each				
 * 10.4. Masonry unit block strength, each				
Masonry Mortar Mix Verification * 10.5 Mix preparation and casting cubes per ASTM C-270 with flow test, each set (does not include strength test cost)\$120.00				
* 10.5 Mix preparation and casting cubes per ASTM C-270 with flow test, each set (does not include strength test cost)\$120.00				\$40.00
each set (does not include strength test cost)\$120.00				
		10.5		\$120.00
* 10.6 Water retention test (does not include mix preparation cost)		* 10.6		

11. SPECIAL TESTS

Tests not listed above are performed, whether outside our laboratory at cost plus 15 percent or on an hourly basis (see Schedule 46.02 for Hourly Rates for Engineering and Technical Personnel).

- (1) Securing samples at local projects, plant or from supplier's stock will be charged at an hourly rate for the technician plus travel at \$0.50 per mile.
- (2) Rush assignments requiring unscheduled overtime are subject to a 50 percent surcharge.
- * These tests are performed only in our Little Rock Laboratory. Additional charges for shipping or transporting samples from our Springdale Laboratory may be applicable.

GRUBBS, HOSKYN, BARTON & WYATT, INC. **CONSULTING ENGINEERS**

HOURLY RATES FOR ENGINEERING AND TECHNICAL PERSONNEL

	Hourly Rates
Senior Principal	\$125 to \$165
Principals	\$110 to \$140
Engineer Managers	\$95 to \$120
Sr. Project Engineers	\$95 to \$120
Project Engineers	\$85 to \$105
Staff Engineers	\$65 to \$85
Technician Supervisor	\$65 to \$85
Senior Technicians	\$55 to \$65
CMT or Geotechnical Technicians	\$50 to \$60
Engineering Aides and Draftspersons	\$35 to \$50

NOTES:

Full-time construction surveillance will be quoted at weekly or monthly rates on a job-(1)by-job basis.

City of Fayetteville - Purchase Order Request (PO)						Requisition No.: Date: Hoskyn, Barton & Wyatt, In Page 37 of 3 P.O Number:			
Vendor #:	288	Vendor Name:	r Grubbs Hoskyn Barton a			nd Wyatt	^{Mail} □ Yes □ No	Legistar#: 2014-0417	
Address:	Po Box 1248			FOB		FOB Point:	Taxable □ Yes □ No	Expected De	
City:	Springdale		State:	ļ	AR	72765 Ship to code:	🗆 Yes 🗖 No		
Requester:					-	Requester's Employee #: 2695	Extension: 8207		
Item	Description	Quantity	Unit of Issue	Unit Cost	Extended Cost	Account Number	Project.Sub#	Inventory #	Fixed Asset #
1	Testing and Inspection Services	1		120,000.00	\$120,000.00	4560.9560.5314.00	11208.1203		
2					\$0.00				
3					\$0.00				
4					\$0.00				
5					\$0.00				
6					\$0.00				
7					\$0.00				
8					\$0.00				
9					\$0.00				
10					\$0.00				
*	Shipping/Handling		Lot		\$0.00				
	Special Instructions:							\$120,000.00 \$0.00 \$120,000.00	
Approvals:							Total:	· ·	-
Mayor:	Mayor: Department Director:						Purchasing Manager:		
Chief Finar	Chief Financial Officer: Budget Director:					IT Director:			
Dispatch N	Dispatch Manager: Utilities Manager:						Other:		

A. 9