## City of Fayetteville Staff Review Form

2019-0086

Legistar File ID

2/19/2019

Duncil Meeting Date - Agenda Item On

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

	N	/A for Non-Agenda Item		
Matt Casey		1/30/2019	ENGINEERING	(621)
Submitted By		Submitted Date	Division / Depa	rtment
	Actio	on Recommendation:		
Approval of a resolution to award RI provider and GTS, Inc. as a secondar as needed through December 31, 20	y provider			
		Budget Impact:		
Account Numbe	r		Fund	
Project Number	-		Project Title	
Budgeted Item?	NA	Current Budget	\$	-
_		Funds Obligated	\$	-
		Current Balance	\$	-
Does item have a cost?	No	Item Cost		
Budget Adjustment Attached?	NA	Budget Adjustment		
_		Remaining Budget	\$	-
Purchase Order Number:		Previous Ordinance	or Resolution #	V20180321
Change Order Number:		Approval Date:		
Original Contract Number:				

**Comments:** 



#### CITY COUNCIL MEMO

#### **MEETING OF FEBRUARY 19, 2019**

TO: Mayor and City Council

**THRU:** Don Marr, Chief of Staff

Garner Stoll, Development Services Director

Chris Brown, City Engineer

FROM: Matt Casey, Engineering Design Manager

**DATE:** January 30, 2019

SUBJECT: Approval of a resolution to award RFQ 19-01, Selection #1 to McClelland

Consulting Engineers, Inc as primary provider and GTS, Inc. as a secondary provider based on rates provided and availability for on-call

materials services as needed through December 31, 2019

#### **RECOMMENDATION:**

A resolution to award RFQ 19-01, Selection #1 to McClelland Consulting Engineers, Inc as primary provider and GTS, Inc. as a secondary provider based on rates provided and availability for on-call materials services as needed through December 31, 2019.

#### **BACKGROUND:**

As part of each of the City's street, drainage, water and sewer projects, a materials testing lab is contracted to perform materials testing for the construction. The testing includes asphalt, gravel base, concrete and various other materials used during the construction of these projects. The testing is done to insure that the materials and the installation meet the City requirements and the project's specifications.

#### **DISCUSSION:**

An engineering selection committee selected McClelland Consulting Engineers, Inc. and GTS, INC. to be used for on-call materials testing services for street, drainage and utilities projects for the remainder of 2019.

#### **BUDGET/STAFF IMPACT:**

Funds for the material testing have been budgeted in various capital projects with the Sales Tax Capital Improvements Fund, the Transportation Bond Fund and the Water and Sewer Fund.

#### Attachments:

**Testing Rate Schedules** 

Laboratory Field Technician

1810 N. College Ave P. O. Box 1229 Favetteville, Arkansas 72702-1229 479-587-1303 Fax 479-443-9241

50.00 per hour

www.mce.us.com

## **CONSTRUCTION MATERIALS LABORATORY FEE SCHEDULE**

January 2019

|--|

ARDOT-Qualified Technician	50.00 per hour
Engineering Technician	80.00 per hour
Mileage	0.58 per mile
Consultation:	
Engineering Technician	80.00 per hour
Geotechnical Engineer	135.00 per hour
Construction Observation	80.00 per hour
Project Engineer	135.00 per hour
Project Manager (Geotechnical Specialist)	85.00 per hour
Principal Engineer	160.00 per hour
Lab Report Preparation	65.00 per hour

#### SOILS:

ARDOT-Qualified Technician II - IV*	50.00 per hour
Soils Field Technician	50.00 per hour

In-Place Compaction Test-Nuclear Gauge ASTM D 2922,

Sample Pickup, or Stand-by Time

cample i lokap, or claira by inno	
Nuclear Density Gauge Fee: (per Density Test); [Minimum \$12.00 per trip, per project	] 12.00 each
Liquid Limit, Plastic Limit, Plasticity Index ( 3 point) ASTM D 4318	50.00 each
Sieve Analysis-Washed No. 200 (Wet) ASTM D 1140	40.00 each test
Sieve Analysis-Dry ASTM D 422	50.00 each test
Hydrometer Analysis ASTM D 422	120.00 each
Specific Gravity ASTM D 854	50.00 each
Soils Classification, Atterberg Limits & Gradation ASTM D 2487	110.00 each
Laboratory Maximum Compaction Test ASTM D 698 or AASHTO T 99	175.00 each
Laboratory Maximum Compaction Test ASTM D 1557 or AASHTO T 180	200.00 each
Potential Volume Change-Swell Pressure	100.00 each
California Bearing Ratio-CBR ASTM D 1883 (3 point) (Proctor curve additional)	300.00 each
Shrinkage ASTM D 427	50.00 each
Soil Bearing Capacity (Engineering Technician)	80.00 per hour

Non-ASTM Procedures Available On Request

#### **CONCRETE**:

Concrete Mix Design	Price on Request
Review Concrete Mix Design (Geotechnical Engineer)	135.00 per hour
Confirm Concrete Mix Design	Price on Request
Concrete Field Technician* (1-hour minimum): [For any of the following 6 items:]	50.00 per hour

Concrete Cylinder, Grout, Mortar or Beam Molding

- Concrete Cylinder or Beam Pickup
- Concrete Slump Test ASTMC 143
- Concrete Air Content Test ASTMC231 or C173
- Cement Mortar or Grout Sampling
- Stand-by Time
- Unit Weight and Yield of Freshly Mixed Concrete ASTM C 138

ARDOT-Qualified Concrete Technician II - IV: [For any of the foregoing 7 items:]	50.00 per hour
Compressive Strength of Concrete Test Cylinders ASTM C 39 (pad cap)	•
(Incl. Processing, Storing & Curing)	20.00 each
Compressive Strength of Concrete Test Cylinders ASTM C 39 (sulfur capped)	
(Incl. Processing, Storing & Curing)	35.00 each
Spare Cylinders Specimens Processed, Stored & Cured but not Tested	15.00 each
Schmidt Hammer Testing (Engineering Technician)	80.00 per hour

1810 N. College Ave P. O. Box 1229 Fayetteville, Arkansas 72702-1229 479-587-1303 Fax 479-443-9241

www.mce.us.com

# CONSTRUCTION MATERIALS LABORATORY FEE SCHEDULE January, 2019

#### **CONCRETE** (Continued):

Flexural Strength of Concrete Beams ASTM C 78 or C 293 (Incl. Processing, Storing & Curing)  Spare Beam Specimens Processed, Stored & Cured but not Tested Compressive Strength of Grout Cubes (Incl. Processing, Storing & Curing) Compressive Strength of Cement Mortar Cubes (Incl. Processing, Storing & Curin Concrete Coring (3" or 4"):	50.00 each 40.00 each 40.00 each g) 25.00 each
Core Machine & Lab Technician I Compressive Strength of Concrete Cores (3" or 4") Other Core Sizes Aggregate Sieve Analysis:	90.00 per hour 40.00 each Price on Request
Dry Sieve ASTM C 136 Wet Sieve ASTM C 117 Fineness Modules  Decantation Deleterious Materials Specific Gravity and Absorption of Aggregate ASTM C 127 & C 128  Dry Rodded Unit Weight of Aggregate ASTM C 29  Sodium or Magnesium Sulfate Soundness (5 cycles) ASTM C 88  Additional Cycles	8.00 each 40.00 each 25.00 each 35.00 each 60.00 each 90.00 each 150.00 each 350.00 each
ASPHALT: Asphalt Mix Design (Marshall Design Method) Review Asphalt Mix Design (Geotechnical Engineer) ARDOT Asphalt Field Technician In-Place Compaction Test-Nuclear Gauge (Lab Technician) Sample Pickup Superpave Laboratory Analysis of Plant Mixed Pavement Marshall Test including Stability, Flow, Laboratory Density, Percent Air Voids, Percent Voids in Mineral Aggregate (3 specimens per test) AC Content Ignition Oven and Aggregate Gradation Laboratory Density of Cored Plugs including Thickness Measurement Asphalt Coring (3" or 4"): Core Machine & Lab Technician	Price on Request 135.00 per hour 50.00 per hour 50.00 per hour 600.00 each 500.00 each 1000.00 each 35.00 each 90.00 per hour
FIREPROOFING: Unit Weight, Bonding Strength, Thickness and Sampling (Actual time required for Lab Technicians) Tech Report Preparation (Geotechnical Engineer)	80.00 per hour 130.00 per hour
STRUCTURAL STEEL:  Bolt Torque Testing: Engineering Technician(s) Project Engineer  Pneumatic Torque Wrench Calibration (twice per day) Visual Weld Inspection Project Engineer Certified Welding Inspector	80.00 per hour 135.00 per hour 50.00 each 135.00 per hour 100.00 per hour

## Services Not Listed are Available on Request

All prices are subject to revision each year

office 479-521-7645

## Fayetteville, Arkansas 72704

fax 479-521-6232

# Fayetteville, Arkansas Office



Category	Name of Test	Description	Relevant ASTM and AASHTO	Hourly Rate	Daily Equipment Fee (if applicable)
Earthwork and Soils	Soil Density Testing	Materials Testing Technician performing in- place soil densities	AASHTO T310, ASTM D6938	\$43.75	NA
	Soil/Aggregate Sample Pick up	On site sampling of soils and aggregates for laboratory testing	AASHTO T2, ASTM D 75	\$43.75	NA
	Proofroll and Undercut Observation	Engineering observation of on site soils prior to placement of fill material or after undercut has been completed	NA	\$89.00	NA
Concrete	Field Concrete Testing	On site sampling, testing and making concrete test specimens of freshly mixed concrete	AASHTO T23, T119, T141, T152, T309, ASTM C31, C143, C172, C231, C1064	\$43.75	NA
	Concrete Cylinder Pick up (per set charge)	Retrieving concrete test specimens made by GTS or by the client	NA	\$30.00	NA
	Concrete Rebound Hammer (Schmidt Hammer)	Assess the in-place uniformity of concrete and to estimate in-place strength	ASTM C805	\$89.00	\$15.00

## office 479-521-7645

## Fayetteville, Arkansas 72704

## fax 479-521-6232

# Fayetteville, Arkansas Office



Category	Name of Test	Description	Relevant ASTM and AASHTO	Hourly Rate	Daily Equipment Fee (if applicable)
Concrete	Concrete Coring and Sampling	Coring and sampling of hardened concrete including backfilling with grout	AASHTO T24 ASTM C42	\$65.00	\$65.00
	Concrete maturity and temperature testing	Placement and downloading of maturity and temperature information and equipment	ASTM C1074	\$89.00	NA
	Concrete maturity and temperature sensors (per sensor fee)	Field Sensors	ASTM C1074	NA	\$70.00
	Floor Flatness Determination	Evaluating and providing statistical (and graphical) information concerning floor surface profiles	ASTM E1155	\$89.00	.02 per square foot
	Concrete Floor Vapor Emission Testing	Obtaining a quantitative value indicating the rate or moisture vapor emission from a concrete floor	ASTM F1869	\$89.00	\$25 per kit
	Concrete Ph testing	Evaluating the Ph of concrete floors	ASTM F710	\$89.00	\$10 per kit
	Concrete mortar time of setting testing	Time of setting concrete by means of penetration resistance method	ASTM C403	\$89.00	\$150.00

## office 479-521-7645

## Fayetteville, Arkansas 72704

## fax 479-521-6232

# Fayetteville, Arkansas Office



Category	Name of Test	Description	Relevant ASTM and AASHTO	Hourly Rate	Daily Equipment Fee (if applicable)
Concrete	Concrete Floor Relative Humidity Insitu Probe Testing	Quantitative determination of percent relative humidity in concrete slabs	ASTM F2170	\$89.00	\$100.00 per site visit
Masonry, Grout and Mortar	Field Grout Testing	On site sampling, testing and making grout test specimens of freshly mixed grout	AASHTO T23, T119, T309, ASTM C1019, C143, C1064	\$46.50	NA
	Field Observation of CMU Block Wall Construction	Visual observation of CMU reinforcing, joint placement, bond beams etc.	NA	\$89.00	NA
	Field Mortar Testing	On site sampling, testing and making mortar test specimens of freshly mixed preblended mortar	ASTM C1714	\$46.50	NA
Asphalt	Asphalt Rolling Pattern	Evaluation of density with passes of compaction equipment of fresh hot mix asphalt	ASTM D2950	\$65.00	NA
	Asphalt coring and sampling	Coring and sampling of in place asphalt including backfilling with grout	ASTM D979, AASHTO T168	\$65.00	\$65.00

## office 479-521-7645

## Fayetteville, Arkansas 72704

## fax 479-521-6232

# Fayetteville, Arkansas Office



Category	Name of Test	Description	Relevant ASTM and AASHTO	Hourly Rate	Daily Equipment Fee (if applicable)
Construction Observation and additional Special Inspections	Observation of straight shaft drilled piers	Observation of soil type, depth, reinforcing bars, bearing capacity, etc.	NA	\$89.00	NA
Construction Observation and additional	Observation of Geopier foundations	Observation of soil type, depth, compactive effort, bearing capacity, etc.	NA	\$89.00	NA
Special Inspections	Observation of retaining wall installation	Observation of retaining wall construction	NA	\$89.00	NA
	Observation of soil bearing capacity for foundation elements	Observation of soil types and bearing capacity	NA	\$89.00	NA
	Observation of reinforcing bars for foundation and structural elements	Observation of size, number and placement of reinforcing bars	NA	\$89.00	NA
	Observation of driven pile foundations	Observation of driven piles, number of blows, pile size, etc.	NA	\$89.00	NA
	Observation of soil nail reinforcement	Observation of soil nails, bar size, bar length, grout type and strength, etc.	NA	\$89.00	NA
	Observation of micropile foundations	observation of micropiles, bar size, bar length, grout type and strength, etc.	NA	\$89.00	NA

office 479-521-7645

## Fayetteville, Arkansas 72704

fax 479-521-6232

# Fayetteville, Arkansas Office



Category	Name of Test	Description	Relevant ASTM and AASHTO	Hourly Rate	Daily Equipment Fee (if applicable)
Construction Observation and additional Special Inspections	Observation of Post Tension concrete systems	observation of installation and tensioning of post tension cables	NA	\$89.00	NA
Construction Observation and additional Special Inspections	Fireproofing Observation	observation of fireproofing for thickness, density and cohesion	ASTM E605	\$89.00	NA
Engineering	Principal Professional Engineer	Professional Engineer services in the field or report writing	NA	\$120.00	NA
	Staff Professional Engineer	Professional Engineer services in the field or report writing	NA	\$100.00	NA
	Intern-Engineer	Intern engineer services in the field or report writing	NA	\$89.00	NA
Structural Steel	Certified Welding Inspector (CWI)	Code compliance, visual and ultrasonic weld inspection, bolt inspection, impact wrench calibration, etc.	Varies	\$120.00	NA
	Reinforcing Bar Locating	Locating reinforcing bars, conduits, post tension cables, etc. in concrete slabs	Varies	\$120.00	\$500.00
	Skidmore Wilhelm	Tension Calibrator	Varies	\$120.00	\$40.00
	Torque Multiplier	Used in conjunction with torque wrench for high strength bolt testing	NA	\$120.00	\$100.00

## office 479-521-7645

## Fayetteville, Arkansas 72704

## fax 479-521-6232

# Fayetteville, Arkansas Office



Category	Name of Test	Description	Relevant ASTM and AASHTO	Hourly Rate	Daily Equipment Fee (if applicable)
Structural Steel	Torque Wrench	Used for testing torque of high strength bolts	Varies	\$120.00	\$20.00
	Ultra Sonic Testing	UT Machine	Varies	\$120.00	\$40.00
	Mag Particle Testing	Mag Particle Yoke	Varies	\$120.00	\$40.00
	x-ray services	x-ray of structural welds	Varies	upon request	upon request
	Bolt Pulling Test	Used to check the suitability and allowable loads of an anchor type and check they have been installed correctly	Varies	\$120.00	\$150.00
Forensic Testing	Impact Echo Services	Using sound waves to determine flaws and/or thicknesses in concrete structures	NA	\$120.00	\$250.00
	Ground Penetrating Radar	Using radar to locate, reinforcing bars or conduits in concrete, underground utilities, underground structures or tanks, etc.	NA	\$120.00	\$500.00

## office 479-521-7645

## Fayetteville, Arkansas 72704

## fax 479-521-6232

# Fayetteville, Arkansas Office



Category	Name of Test	Description	Relevant ASTM and AASHTO	Hourly Rate	Daily Equipment Fee (if applicable)
Forensic Testing	Sonic Echo Impulse Response	Non-Destructive method of determining length and integrity of concrete foundations	NA	\$120.00	\$1,000.00
	FLIR Infrared Camera Imaging	Infrared imaging of building components using a Flir E60 camera	NA	\$120.00	\$400.00
Administrative and Mileage	Mileage	Portal to portal rates to and from the GTS, Inc. office to the jobsite	NA	Based on published current IRS government mileage rates plus 5%	
	Report Preparation and Review (Per Report)	Includes report typing and distribution. (Technician reports only)	NA	\$10.00	NA
	Overtime, Weekend, and Holiday Rates	Work requested to be performed on weekends or prior to 6:00 am and after 6:00 pm Monday through Friday will be billed an additional \$5 pe hour above the normal hourly rates listed above and Holiday will be Triple the normal hourly rates.  Any test scheduled before 5:00 A.M. but not performed by no fault of GTS will be a minimum charge of \$200.00.			
	Minimum Time Charge	There is a Minimum charge of 1 hour on site Time and .5 hour tra time			nd .5 hour travel



Category	Name of Test	Description	Relevant ASTM and AASHTO	Unit Rate
Earthwork and Soils and Aggregates	Moisture - Density Relationship	Standard Proctor	AASHTO T99, ASTM D698	\$129.00
	Moisture - Density Relationship	Modified Proctor	AASHTO T180, ASTM D1557	\$149.00
	Moisture Content	Moisture content of soils	ASTM D2216	\$10.50
	Atterberg Limits	3 point wet preparation for liquid limit and one point plastic limit	AASHTO T-89, AASHTO T-90, ASTM D 4318	\$62.00
	Sieve Analysis	Washed and dried sieve used for soil classification determination (< 5 lbs)	ASTM C136	\$62.00
	Sieve Analysis	Washed and dried oversized sieve (greater than 5 lbs)	AASHTO T 27, ASTM C136	\$129.00
	Sieve Analysis (Hydrometer)	Fine particle determination using a hydrometer	AASHTO T 88, ASTM D 422	\$103.00
	Specific Gravity and Absorption	Determination of specific gravity and absorption or material retained on a #4 or 3/4" sieve	AASHTO T 100, ASTM D 854	\$52.00
	California Bearing Ratio (CBR) 3-point method	Evaluating the potential strength of subgrade, subbase, and base course material, for use in road and airfield pavements.	ASTM D 1883, AASHTO T 193	\$259.00

GTS, Inc.
Geotechnical & Testing Services

Category	Name of Test	Description	Relevant ASTM and AASHTO	Unit Rate
Earthwork and Soils and Aggregates	Unconfined Compressive Strength Testing	Obtain a measure of compressive strength for soils that possess sufficient cohesion to permit testing in the unconfined state	ASTM D 2166, AASHTO T 208	\$100.00
	Triaxial testing**	Unconsolidated - Undrained (UU)	AASHTO T 296, ASTM D 2850	\$375.00
	Triaxial testing**	Consolidated - Undrained (CU)	AASHTO T 297, ASTM D 4767	\$500.00
	Triaxial testing**	Consolidated - Drained (CD)	ASTM WK 3821	\$750.00
	Soil Consolidation  ** (One- Dimensional, Interval Loading)	Determining the magnitude and rate of consolidation of soil when it is restrained laterally and drained axially while subjected to incrementally applied controlled-stress loading.	ASTM D 2435, AASHTO T 216	\$300.00
	Permeability Testing (Flexible Wall)**	These test methods apply to one- dimensional, laminar flow of water within porous materials such as soil and rock.	ASTM D 2434, AASHTO T-215, ASTM D 5084	\$300.00
	**	sample prep or remolding	NA	\$75.00

GTS, Inc.
Geotechnical & Testing Services

Category	Name of Test	Description	Relevant ASTM and AASHTO	Unit Rate		
	Sand Equivalency Test	This test assigns an empirical value to the relative amount, fineness, and character of claylike material present in the specimen.	ASTM D 2419, AASHTO T 176	\$150.00		
	Soundness of Aggregates	Standard Test Method for Soundness of Aggregates by Use of Sodium Sulfate	ASTM C 88, AASHTO T 104	\$425.00		
Earthwork and Soils and Aggregates	LA Abrasion	Resistance to Degradation of Large-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine	ASTM C 131, AASHTO T 96	\$575.00		
	Deleterious Material Determination	determination of friable particles, clay lumps, and soft fragments in an aggregate	NA	\$55.00		
	Swell Test ** (One- Dimensional)	Standard Test Method for One- Dimensional Swell or Settlement Potential of Cohesive Soils	ASTM D 4546, AASHTO T 216	\$300.00		
	Soil Stabilization	using fly ash, cement and lime to stabilize soils	NA	call for quote		
	***For any soils and aggregate lab testing not listed please call for quote***					
Concrete and Masonry	Laboratory Compressive Strength of Cylinders	Curing, Storing and Testing (Pad Capping) 6" x 12" cylinders	ASTM C 39	\$12.50		
	Laboratory Compressive Strength of Cylinders	Curing, Storing and Testing (Pad Capping) 4" x 8" cylinders	ASTM C 39	\$11.00		

GTS, Inc.

Geotechnical & Testing Services

Category	Name of Test	Description	Relevant ASTM and AASHTO	Unit Rate
	Laboratory Flexural Strength of Beams (per beam)	Curing, Storing and Testing 6" x 6" x 18" beams	ASTM C 78	\$35.00
	Laboratory Compressive Strength of drilled cores	Curing, Storing and Testing (sulfur Capping)	ASTM C 42, ASTM C 39	\$35.00
	Saw cutting cylinders and drilled cores	Saw cutting ends of contractor formed cylinders to achieve a perpendicular surface (per end)	NA	\$5.00
	Petrographic Analysis	Microscopic analysis of hardened concrete	ASTM C 457	Call for Quote
Concrete and Masonry	Laboratory Compressive Strength of Grout Prisms	Curing, Storing and Testing (Pad Capping) 6" x 3" x 3" prisms	ASTM C 1019	\$25.00
	Laboratory Compressive Strength of mortar cubes	Curing, Storing and Testing (Pad Capping) 2" x 2" x 2" cubes	ASTM C 109	\$25.00
	Laboratory testing of concrete masonry units	This test methods provides various testing procedures commonly used for evaluating characteristics of concrete masonry units and related concrete units.	ASTM C 140	\$120.00
Asphalt	Laboratory testing of Asphalt Cores	Laboratory Testing of asphalt cores for specific gravity (density)	AASHTO T-166	\$35.00
Fireproofing	Laboratory Density of Fireproofing (each density)	Laboratory determination of SRFM density	ASTM E 605	\$60.00