#### AGREEMENT FOR PROFESSIONAL SERVICES

#### **BY AND BETWEEN**

#### MADISON COUNTY BOARD OF SUPERVISORS

### AND

### **BURNS COOLEY DENNIS, INC.**

#### FOR

### GEOTECHNICAL AND PAVEMENT ENGINEERING SERVICES

THIS AGREEMENT, made effective this the , 2016 by and between MADISON COUNTY BOARD OF SUPERVISORS, hereafter called the OWNER, and BURNS COOLEY DENNIS, INC., Consulting Engineers, having its principal place of business at 551 Sunnybrook Road in Ridgeland, Mississippi 39157, hereinafter called the GEOTECHNICAL ENGINEER

### WITNESSETH:

WHEREAS, the OWNER desires to employ the services of the GEOTECHNICAL ENGINEER for the purpose of supporting, supplementing and advising the OWNER in matters of planning and construction by third party interests as such matters are governed by the OWNER's ordinances in effect at the time of review, and

WHEREAS, the OWNER further desires to employ the services of the GEOTECHNICAL ENGINEER for the purpose of supporting and supplementing the OWNER's mission to construct, re-construct, modify or improve its municipal system, sewer system, streets, roads, bridges, drainage facilities and such other matters that are the corporate responsibility of Madison County, MS, and

WHEREAS, the OWNER desires the GEOTECHNICAL ENGINEER to perform the necessary services on a case by case or project by project basis within the scope defined by

the OWNER at the time of assignment of the work to the GEOTECHNICAL ENGINEER, and

WHEREAS, the GEOTECHNICAL ENGINEER desires to provide all necessary services that may be required by the OWNER.

NOW THEREFORE, BE IT MUTUALLY AGREED, by and between the OWNER and the GEOTECHNICAL ENGINEER that the GEOTECHNICAL ENGINEER shall perform all assignments in a timely and efficient manner.

OWNER and the GEOTECHNICAL ENGINEER further agree that compensation to the GEOTECHNICAL ENGINEER shall be on an hourly basis and unit rates plus direct related expenses as set forth hereinafter and that the terms and conditions also set forth hereinafter shall govern the services provided by the GEOTECHNICAL ENGINEER.

# Part I. GEOTECHNICALENGINEERING CHARGES

## HOURLY RATE SCHEDULE

A. In accordance with the Terms and Conditions of this Agreement, the GEOTECHNICAL ENGINEER shall provide professional services for which the OWNER shall compensate the GEOTECHNICAL ENGINEER on the basis of the attached unit fee schedule.

## SEE ATTACHED STANDARD FEE SCHEDULE 2016

# Part II. TERMS AND CONDITIONS

# Article 1 GEOTECHNICAL ENGINEER'S SERVICES

## **1.1 Basic Services**

The GEOTECHNICAL ENGINEER agrees to perform professional services in connection with the assigned Projects, including normal geotechnical, pavement and construction phase engineering related thereto, as set forth below and contained within this Agreement.

# **1.1.1 GEOTECHNICAL ENGINEERING Report (IfApplicable)**

During the GEOTECHNICAL ENGINEERING Report Phase the GEOTECHNICAL ENGINEER shall:

1.1.1.1 Furnish soils data including but not limited to reports, test borings, test pits, probings, subsurface exploration, soil bearing values, percolation tests, ground corrosion and resistivity tests, all with appropriate professional interpretation.

# **1.1.2** Construction Phase (If Applicable)

1.1.2.1 Furnish construction observation and materials testing of asphalt, concrete, earthwork or related construction materials to check materials incorporated into the work for compliance with the Project Specifications.

1.1.2.2 The GEOTECHNICAL ENGINEER shall not be responsible for the defects or omissions in the work result of the Contractors, or any Subcontractors, or any of the Contractor's or Subcontractor's employees, or that of any other persons or entities responsible for performing any of the work result as contained in the Construction Contract.

# Article 2 OWNER'S RESPONSIBILITIES

The OWNER shall:

2.1 Provide to the GEOTECHNICAL ENGINEER all criteria, design and construction standards and full information as to the OWNER'S requirements for the Project.

2.2 Designate in writing a person authorized to act as the OWNER'S representative. The OWNER or his representative shall receive and examine documents submitted by the GEOTECHNICAL ENGINEER, interpret and define the OWNER'S policies and render decisions and authorizations in writing promptly to prevent unreasonable delay in the progress of the GEOTECHNICAL ENGINEER'S services.

2.3 Guarantee full and free access for the GEOTECHNICAL ENGINEER to enter upon all property required for the performance of the GEOTECHNICAL ENGINEER'S services under this Agreement.

2.4 Give prompt written notice to the GEOTECHNICAL ENGINEER whenever the OWNER observes or otherwise becomes aware of any defect in the Project or other event which may substantially affect the GEOTECHNICAL ENGINEER'S performance of services under this Agreement.

2.5 Compensate the GEOTECHNICAL ENGINEER for services rendered under this Agreement.

# Article 3 PAYMENTS TO THE GEOTECHNICAL ENGINEER

3.1 Payments shall be made for the services rendered and as indicated within this Agreement and shall be due and owing within thirty days of the GEOTECHNICAL ENGINEER'S submittal of his monthly statement.

3.2 If the Project is delayed or if the GEOTECHNICAL ENGINEER'S services for the Project are delayed or suspended for more than three months for reasons beyond the GEOTECHNICAL ENGINEER'S control, the GEOTECHNICAL ENGINEER may, after giving seven days written notice to the OWNER, terminate this Agreement and the OWNER shall compensate the GEOTECHNICAL ENGINEER in accordance with the termination provision contained hereafter in this Agreement.

# Article 4 GENERAL PROVISIONS

## 4.1 Ownership of Documents

All Drawings, Specifications and other work product of the GEOTECHNICAL ENGINEER for this Project are instruments of service for this Project only and are the property of the OWNER. GEOTECHNICAL ENGINEER shall have the right to retain copies of all documents and drawings for its files. Reuse of any of the instruments of service of the GEOTECHNICAL ENGINEER by the OWNER on extensions of this Project or on any other project shall be at the OWNER'S risk and the OWNER agrees to defend, indemnify and hold harmless the GEOTECHNICAL ENGINEER from all claims, damages, and expenses including attorney's fees arising out of such unauthorized reuse of the GEOTECHNICAL ENGINEER'S instruments of service by the OWNER OR BY OTHERS ACTING THROUGH THE OWNER. Any reuse or adaptation of the GEOTECHNICAL ENGINEER'S instruments of service occurring after the written agreement of the GEOTECHNICAL ENGINEER shall entitle the GEOTECHNICAL ENGINEER to further compensation in amounts to be agreed upon by the OWNER and the GEOTECHNICAL ENGINEER.

## 4.2 Delegation of Duties

Neither the OWNER nor the GEOTECHNICAL ENGINEER shall delegate his duties under this Agreement without the written consent of the other.

## 4.3 Termination

Either party may terminate this Agreement without cause upon thirty (30) days' notice in writing. If either party breaches this Agreement, the non-defaulting party may terminate this Agreement after giving seven (7) days' notice to remedy the breach. On termination of this Agreement, the OWNER shall forthwith pay GEOTECHNICAL ENGINEER for the services performed to the date of termination. OWNER may terminate for convenience, in which case GEOTECHNICAL ENGINEER shall be paid for work completed to date.

# 4.4 Extent of Agreement

This Agreement represents the entire and integrated agreement between the OWNER and the GEOTECHNICAL ENGINEER and supersedes all prior negotiations, representations or agreements, either written or oral. This Agreement may be amended only by written instrument signed by both the OWNER and the GEOTECHNICAL ENGINEER.

# 4.5 Governing Law

Unless otherwise specified within this Agreement, this Agreement shall be governed by the law of Madison County and the State of Mississippi.

# 4.6 General

4.6.1 Should litigation or arbitration occur between the two parties relating to the provisions of this Agreement, all litigation or arbitration expenses, collection expenses, witness fees, court costs and attorneys' fees incurred by the prevailing party shall be paid by the non-prevailing party to the prevailing party.

4.6.2 Neither party shall hold the other responsible for damages or delay in performance caused by acts of God, strikes, lockouts, accidents, to other events beyond the control of the other or the other's employees and agents.

4.6.3 In the event any provisions of this Agreement shall be held to be invalid and unenforceable, the remaining provisions shall be valid and binding upon the parties. One or more waivers by either party of any provision, term, condition or covenant shall not be construed by the other party as a waiver of a subsequent breach of the same by the other party.

4.6.4 The GEOTECHNICAL ENGINEER intends to render his services under this Agreement in accordance with generally accepted professional practices for the intended use of the Project and makes no warranty either express or implied.

## Article 5. INSURANCE

6.1. **GEOTECHNICAL ENGINEER** represents that it and its agents, staff and consultants employed by it, is and are protected by workers' compensation insurance, commercial general and umbrella liability insurance, automobile liability insurance and professional liability insurance which we deem to be adequate. Certificates of insurance for all such policies shall be provided to Owner upon request in writing. Within the limits and conditions of such insurance, BCD agrees to indemnify and save Owner harmless from and against any loss, damage or liability arising from any negligent acts by BCD and its agents, staff and consultants employed by Geotechnical Engineer. Geotechnical Engineer shall not be responsible for any loss, damage or liability beyond the amounts, limits and conditions of such insurance. Geotechnical Engineer shall not be responsible for any loss, damage or liability arising from any negligent acts by BCD and its agent, staff and consultants employed by Geotechnical Engineer. Geotechnical Engineer shall not be responsible for any loss, damage or liability arising from the amounts, limits and conditions of such insurance. Geotechnical Engineer shall not be responsible for any loss, damage or liability arising from any acts by Owner, its agents, staff and other consultants employed by Owner.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be signed by their duly authorized representatives on the day and year first above written.

MADISON COUNTY, MISSISSIPPI

BURNS COOLEY DENNIS, INC.

TREY BAXTER BOARD PRESIDENT R. C. Ahlrich, Ph.D., P.E., PRINCIPAL

ATTEST:

RONNY LOTT CHANCERY CLARK

(SEAL)

(SEAL)

#### SCHEDULE OF FEES GEOTECHNICAL SAMPLING AND TESTING CONSTRUCTION MATERIALS ENGINEERING AND TESTING SERVICES

#### Personnel

Personnel charges are for professional, technical and support services required on projects including office, field and travel time.

Project Manager	
Project Engineer	
Engineer	
Structural Steel Inspector	
Lab/Field Supervisor	
Technician	
Draftsperson	
Administrative/Clerical	

### **Other Project Charges**

Expenses and subcontractor services incurred	
directly for the project	Cost + 15%
Automobile and light truck	\$0.60/mile
Subsistence	\$130.00/day
Pile Driving Analyzer (PDA) equipment	\$765.00/day
CAPWAP software usage	\$116.00
Photocopies - 8.5" x 11"	\$0.15/copy
Photocopies - 11" x 17"	

#### SUBSURFACE EXPLORATION FEES

#### Mobilization/Demobilization

Transportation from office to jobsite and return	
Drill rig, water truck, pickup truck and crew	\$5.00/mi
Drill rig, pickup truck and crew	4.50/mi
Pickup truck and crew	140.001hr

#### **Drilling and Sampling**

Soil borings with 3-in. OD Shelby tube and/or ASTM split-spoon samples

a.	Sampl	les at 5-ft intervals	
	(1)	Zero to 50-ft depths	18.75/ft
	(2)	50-ft to 100-ft depths	
	(3)	100-ft to 150-ft depths	25.25/ft
b.	Contin	nuous sampling	
	(1)	Zero to 10-ft depths	21.00/ft
	(2)	10-ft to 20-ft depths	24.75/ft
	(3)	20-ft to 30-ft depths	28.50/ft
	(4)	30-ft to 40-ft depths	32.25/ft
c.	Extra 3	3-in. OD Shelby tube or ASTM split-spoon samples	
	(1)	Samples, zero to 50-ft depths	35.75ea
	(2)	Samples, 50-ft to 100-ft depths	51.50/ea
	(3)	Samples, 100-ft to 150-ft depths	67.25/ea
Rotary	wash be	orings, hole logged from cuttings, but without sampling	11.75/ft

Machine auger borings with disturbed samples	
a. Zero to 20-ft depths	15.00/ft
b. Deeper than 20 ft	
Hand auger borings with disturbed samples	1
a. Zero to 10-ft depths	
b. Deeper than 10 ft	On request
Surcharge for drilling and sampling using swamp-buggy-	-
mounted drill rig and water-buggy	
Setting and pulling casing in excess of 5 ft	
Rock drilling	
NX rock coring	
Other Field Operations Boring layout by drill crew Standby of 3-man crew and equipment and moving time	130.00/hr
in excess of 30 min. per boring	
Hourly rate for borings, setting piezometers, monitoring wells, and slope inclinometer casing, or other field operations using a	
3-man crew and truck-mounted equipment	
Pavement patch/corehole	20.00/ea
Grouting	5.25/ft
Equipment Rental and Special Materials Rental cost of dozer; subcontract costs; surveying costs; cost of piezometer or	
observation well materials; or other special equipment or materials required	Cost +15%
Crew Subsistence Allowance	
Overnight expenses per man	130.00/day

### SOILS LABORATORY FEES

# Strength and Compressibility Tests

Unconfined c	ompression test	\$45.00
Triaxial comp	pression test/specimen	
a.	Unconsolidated-undrained	
b.	Consolidated-undrained w/ppm	
Preparation o	f remolded or compacted specimens	
for unconfi	ned or triaxial compression tests	
Consolidation	n test	
a.	Using 8 load increments	
b.	Each additional load increment	
	d test	
Swell Test		
Note: The a	bove tests include determination of	
natur	al water content and density.	

### **Classification Tests**

Liquid and plastic limits (1-pt)	
Liquid and plastic limits (3-pt)	
Shrinkage limit	
Visual classification	
v isual classification	

Sieve analysis		
a.	Sands	
b.	Gravels and sand-gravel mixtures	
	han No. 200 sieve	

### **Other Physical Tests**

Water conten	t	
Density of un	disturbed sample	
Specific gravi	ity (fine-grained soil)	
Permeability	(ASTM D 5084)	
Compaction (	ASTM D 698 or 1557)	
a.	Standard	
b.	Modified	
Torvane		
Table vane sh	ear	
California Be	aring Ratio (1-pt)	
California Be	aring Ratio (3-pt)	

<u>Note</u>: Samples from geotechnical investigations that are not tested will be retained for 60 days after issuance of the report, unless otherwise requested.

### CONSTRUCTION MATERIALS TESTING FEES

#### **Soils and Aggregates**

Sieve analysis - fine aggregate	\$100.00
Sieve analysis - coarse aggregate	
Sieve analysis – crushed stone/concrete base	
Sieve analysis - gravel base	
Specific gravity - soil	
Specific gravity - fine aggregate	
Specific gravity - coarse aggregate	
Minus No. 200 wash	
Hydrometer	
Liquid and plastic limits (1-pt)	
Liquid and plastic limits (3-pt)	
Shrinkage limit	
Fine aggregate angularity	
Fractured faces - coarse aggregate	
Flat and elongated particles	
Sand equivalent	
LA abrasion	
Soundness	
Compaction (ASTM D 698 or 1557)	
a. Standard	
b. Modified	

### Hot Mix Asphalt (HMA)

### Asphalt Cores

Bulk specific gravity	
Asphalt content (extraction)	
Aggregate gradation (extracted aggregate)	
Maximum specific gravity (Rice method)	
Sample preparation (per core)	

# Loose Bulk HMA Materials

Asphalt content (extraction).	100.00
Aggregate gradation (extracted aggregate)	
Maximum specific gravity (Rice method)	
Asphalt cement recovery	
Marshall compaction and density	
Marshall stability and flow	
SHRP gyratory compaction and density	

# Mix Designs

Marshall method	3,000.00
Superpave gyratory method	6,000.00
Moisture susceptibility (TSR)	750.00

# **Asphalt Binder**

Specific gravity	\$100.00
Penetration	
Kinematic viscosity	
Absolute viscosity	
Softening point	
Dynamic shear rheometer (DSR)	
Bending beam rheometer (BBR)	
Brookfield viscosity	
RTFO aging	
PAV aging	
PG grading	
PG verification	1,000.00/sample

### Concrete

Compressive strength test of cylinders	
Core (trimmed and capped)	
Flexural strength test of beams.	
Splitting tensile test of cylinders	75.00

### **Other Project Charges**

Asphalt coring (plus charges for technician time and mileage)	12.00/in.
Concrete coring (plus charges for technician time and mileage)	18.00/in.
Pavement patch - corehole	
Pavement patch - beam	
Nuclear gauge equipment	
Dipstick equipment (plus charges for technician time and mileage)	
GPR equipment	
Truck fee	