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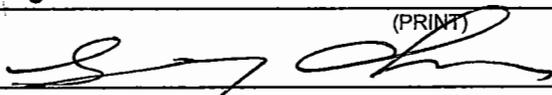
P-46-2024

To the Monmouth County Board of County Commissioners:

**THE UNDERSIGNED HEREBY DECLARES THAT
I (WE) HAVE CAREFULLY EXAMINED THE SPECIFICATIONS.
I (WE) HEREBY CERTIFY PRICES QUOTED ARE IN ACCORDANCE
WITH YOUR REQUIREMENTS.**

Company Name: Keegan Technology & Testing Associates, Inc. T/A Key-Tech
(PRINT)

Preparer's Name: Song Chen
(PRINT)

Signature:  9/6/24
(DATE)

Address: 210 Maple Pl.
Keyport, NJ 07735

Telephone No.: 732 888 8308

Fax No.: 732 888 8307

E-Mail Address: schen@keytechlabs.com
*****(This should be the email where Contracts would be sent)*****

Contact Person: Song Chen

FEIN: 

(Federal Employee ID)

BRC: 

(Business Registration Certificate)

(Revised 2/2017)

FEE SCHEDULE FORM

ASCE GRADE	EQUIVALENT FEDERAL GENERAL SCHEDULE GRADE	EQUIVALENT FIRM TITLE (TO BE ADDED BY FIRM)	BILLING RATE
Clerical			
ETI			
ETII			
ETIII			
ETIV			
ETV			
PI	GS-5	Inspector	\$ 60.00/hr
PII	GS-7	Senior Inspector	\$ 75.00/hr
PIII	GS-9		
PIV	GS-11		
PV	GS-12		
PVI	GS-13	Professional Engineer	\$ 140.00/hr
PVII	GS-14		
PVIII	GS-15	Vice President	\$ 150.00/hr
PIX	Senior Executive Service		

DIRECT EXPENSES	UNIT COST(S)
Reproduction	N/A
Postage/Delivery	N/A
Transportation Cost Per Mileage	\$0.67/per mile

NOTE:

1. Billing Rate shall include all overhead, profit and employee benefits.

TOTAL PROJECT COST	\$100,000.00
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FEE SCHEDULE FORM

		<u>Billing Rate</u>
<u>CONCRETE</u>		
<u>I. Preliminary Test of Aggregates</u>		
<u>Fine Aggregate</u>		
(a)	Sieve Analysis & Fineness Modulus:	
	A.S.T.M. C-33 (C-136)..... per sample	\$ 60.00
(b)	Specific gravity & absorption: A.S.T.M. C-128... per sample	\$ 35.00
(c)	Organic impurities: A.S.T.M. C-40..... per sample	\$ 25.00
(d)	Silt & Clay: A.S.T.M. C-117..... per sample	\$ 45.00
(e)	Unit weight & void content: A.S.T.M. C-29..... per sample	\$ 45.00
(f)	Strength Comparison: A.S.T.M. C-87..... per sample	\$ 130.00
(g)	Efflorescence: A.S.T.M. C-67..... per sample	\$ 100.00
(h)	Soundness (Sodium or Magnesium Sulfate: A.S.T.M. C-88	
	First five (5) cycles.....	\$150.00
	Each additional cycle.....	\$ 25.00
<u>Coarse Aggregate</u>		
(a)	Sieve Analysis & Fineness Modulus:	
	A.S.T.M. C-33 (C-136)..... per sample	\$ 60.00
(b)	Specific gravity & absorption: A.S.T.M. C-127... per sample	\$ 35.00
(c)	Organic impurities: A.S.T.M. C-40..... per sample	\$ 25.00
(d)	Unit weight & void content: A.S.T.M. C-29..... per sample	\$ 45.00
(e)	Abrasion (Los Angeles): A.S.T.M. C-131..... per sample	\$ 235.00
(f)	Deleterious substances: A.S.T.M. C-33..... per sample	\$ 45.00
(g)	Soundness: (Sodium or Magnesium Sulfate): A.S.T.M. C-88	
	First Five (5) cycles.....	\$ 150.00
	Each additional cycle.....	\$ 25.00

FEE SCHEDULE FORM

Billing Rate

CONCRETE

II. Concrete Design Mix

- (a) Review mixes submitted for approval designed by others..... per mix \$60.00
- (b) Preliminary mix design recommendation A.C.I. 301.....per mix \$ 125.00
- (c) Fabricate, cap, cure, test & report 6" x 12" Test cylinders to confirm concrete design mix.....per cylinder \$ 25.00
- (d) Fabricate, cure, test & report flexure beam Test specimens to confirm concrete design mix.....per beam \$ 75.00

III. Controlled Concrete

- (a) Batch Plant Inspector
Furnish a technical inspector to be placed at the batch plant or the project site to assure that only the approved materials are used; observe mixing and placing of concrete, fabricate test cylinders, conduct slump test, air test, monitor temperature and check yield as required.....per day \$ 400.00
- (b) Field Inspector
Furnish a technical inspector to be placed at the project site to observe the mixing and placing of concrete, fabricate the required number of 6" x 12" test cylinders (or beams), conduct slump test, air test, monitor temperatures, and check yield as required.....per day \$ 400.00
- (c) Senior Field Inspector
As well as item (b), this inspector to check forms for cleanliness and mortar tightness. Also he shall review blueprints and check placements of reinforcing steel to assure proper placement (spacing, ties, laps), size and quantity of bars.....per day \$ 445.00

IV. Test Cylinders

- (a) Cap, cure, test and report results of 6" x 12" test cylinders.....per cylinder \$ 17.00
- (b) Transportation of test cylinders.....per trip \$ 65.00

FEE SCHEDULE FORM

Billing Rate

CONCRETE

V. Core Drilling

- (a) Supply one drilling unit and labor to obtain specimens of hardened concrete A.S.T.M. C-42 (4 ½ diameter or less)

vertical	per linear ft.	N/A
horizontal	per linear ft.	N/A
Minimum Per Day		\$ 950.00
- (b) Prepare concrete cores for compression testing.....per core \$ 40.00
- (c) Compression tests & reports.....per core \$ 17.00

VI. Chemical Analysis

- (a) Chemical analysis of hardened concrete A.S.T.M. C-85per sample \$ 700.00
- (b) Chloride content testing and analysis A.S.T.M. C-1218per sample \$ 75.00

VII. Winsor Probes Test of Hardened Concrete

- (a) Furnish a technical inspector along with Windsor Probe apparatus to test in-place concrete per day \$ 370.00
 plus per probe \$ 30.00

VIII. Swiss Hammer Test of Hardened Concrete

- (a) Furnish a technical inspector along with Swiss Hammer apparatus to test in-place concrete per day \$ 390.00

FEE SCHEDULE FORM

	<u>Billing Rate</u>
<u>BITUMINOUS CONCRETE</u>	
<u>I. Preliminary Test of Aggregates – N.J.D.O.T. Specifications</u>	
(a) Sieve analysis (dry)per sample	<u>\$ 60.00</u>
(b) Sieve analysis (wet)per sample	<u>\$ 70.00</u>
(c) Abrasion (Los Angeles) per sample	<u>\$ 350.00</u>
(d) Absorption & specific gravityper sample	<u>\$ 35.00</u>
(e) Clay & clay lumps.....per sample	<u>\$ 45.00</u>
(f) Organic impuritiesper sample	<u>\$ 30.00</u>
(g) Soundness (Sodium Sulfate) five (5) cycles....per sample	<u>\$ 200.00</u>
<u>II. Bituminous Mix Design – N.J.D.O.T. Specifications</u>	
(a) Marshall Methodper mix	<u>\$ 850.00</u>
<u>III. Quality Control Test – N.J.D.O.T. Specifications</u>	
(a) Extraction analysis per sample	<u>\$ 85.00</u>
(b) Stability & flowper sample	<u>\$ 40.00</u>
(c) Bulk Specific gravity (density determination).per sample	<u>\$ 40.00</u>
(d) Maximum theoretical specific gravity by A.S.T.M. D2041.....per sample	<u>\$ 90.00</u>
<u>IV. Plant Control & Inspection – N.J.D.O.T. Specification</u>	
(a) Furnish a technician to witness all weighting of delivery trucks and accordingly determine the quantity of materials furnished to the project.....per day	<u>\$ 460.00</u>
(b) Furnish an asphalt mixing plant inspector to witness the loading of all materials and to make continuous temperature checks of finished products; this inspector shall also take samples of materials and perform all quality control test as per the specifications.....per day	<u>\$ 480.00</u>

FEE SCHEDULE FORM

Billing Rate

BITUMINOUS CONCRETE

V. Field inspection

(a) Furnish an inspector at the field site to witness the preparing of sub-base and tack coat as well as witness placing all asphaltic materials to determine the thickness of material being laid and to see that it is properly compacted and rolled.....per day \$ 400.00

(b) Nuclear Density Testing

Furnish a certified senior inspector to monitor compaction on effort during lay down operation or to obtain data for acceptance criteria..... per day \$ 480.00

VI. Core Drilling

(a) Supply one drilling unit and labor to obtain specimens of finished pavement:

6" diameter per linear foot N/A
 8" diameter per linear foot N/A
 Minimum day \$950.00

Police traffic control is not included.

PIPE PRECAST, PILES

I. Manufacturing Inspection

(a) Place a technical inspector at point of fabrication to observe all phases of production and to witness and monitor all quality control test as required by the governing specification.

Precast Concrete Pipe	per day	<u>\$ 500.00</u>
Asbestos Cement Pipe	per day	<u>\$ 500.00</u>
Poly Vinyl Chloride Pipe	per day	<u>\$ 500.00</u>
Vitrified Clay Pipe	per day	<u>\$ 500.00</u>
Ductile Iron Pipe	per day	<u>\$ 500.00</u>
Steel Pipe	per day	<u>\$ 500.00</u>
Manholes	per day	<u>\$ 500.00</u>
Precast Piles	per day	<u>\$ 500.00</u>
Precast Beam, Column & Architectural Member	per day	<u>\$ 500.00</u>

FEE SCHEDULE FORM

Billing Rate

PIPE PRECAST, PILES (cont.)

II. Piles (wood, steel, concrete, Franki)

- (a) Pile Driving Inspection
Senior inspector to check driving rig, hammer,
pile dimensions, monitor blow count and determine
tip and cut off elevations.....per day \$ 500.00

- (b) Pile Driving Inspection
Professional Engineer to check driving rig, hammer,
pile dimension, monitor blow count and determine
top and cut-off elevationsper hour \$ 140.00

STRUCTURAL STEEL

I. Plant Inspection

- (a) Place a technical inspector at the point of fabrication to
monitor all dimensions, painting, bolt hole placement, shop welds
and any other required inspections.....per hour \$ 100.00

II. Field Inspection

- (a) Inspector to test high strength bolts for proper torque....per hour \$ 90.00

- (b) Inspector to check plumbness of erected membersper hour \$ 90.00

- (c) Inspector to visually inspect field welding at job site.....per hour \$ 90.00

FEE SCHEDULE FORM

		<u>Billing Rate</u>
<u>MASONRY</u>		
I.	<u>Preliminary Test of Aggregates</u>	
(a)	Sieve Analysis of fineness modulus:	
	A.S.T.M. C-144..... per sample	<u>\$ 90.00</u>
(b)	Deleterious Substances A.S.T.M. C-144..... per sample	<u>\$ 50.00</u>
(c)	Organic Impurities A.S.T.M. C-144..... per sample	<u>\$ 25.00</u>
(d)	Soundness: A.S.T.M. C-88 (First 5 cycles)..... per sample	<u>\$ 150.00</u>
	(Each additional cycle)..... per sample	<u>\$ 25.00</u>
II.	<u>Mortar & Grout Mix Designs</u>	
(a)	Review mixes submitted for approval by "others" (A.S.T.M. C-270, mortar C-476 grout)per mix	<u>\$ 55.00</u>
(b)	Fabricate, cure, test, and report 2 x 2 x 2 test cubes to confirm mix proportions (set of 3 cubes) A.S.T.M. C-109per set	<u>\$ 90.00</u>
III.	<u>Field Inspection</u>	
(a)	Senior inspector inspect masonry construction to see that proper brick and block are used to check mortar & grout proportions and take periodic 2 x 2 x 2 cubes and to witness reinforcing, plank and grout placement.....per hour	<u>\$ 65.00</u>
(b)	Cure, test, and report 2 x 2 x 2 test specimen (set of 3).....per set	<u>\$ 75.00</u>
(c)	Transportation of specimens.....per trip	<u>\$ 65.00</u>
IV.	<u>Concrete Masonry Units (Concrete Building Brick A.S.T.M. C-55, Masonry units for catch basins and manholes C-139, hollow load bearing C-90, non-load bearing C-129, solid load bearing (C-145)</u>	
(a)	Compressive strength, absorption & dimension A.S.T.M. C-140 (set of 3 units).....per set	<u>\$ 190.00</u>
(b)	Efflorescence A.S.T.M. C-67 (set of 10 units).....per set	<u>\$ 265.00</u>
V.	<u>Prisms</u>	
(a)	Compressive strength A.S.T.M. E-447	
8" block per prism	<u>\$ 110.00</u>
12" block per prism	<u>\$ 150.00</u>



RE: ON-CALL PROFESSIONAL CONSTRUCTION PHASE ENGINEERING AND TESTING SERVICES IN CONNECTION WITH VARIOUS MONMOUTH COUNTY MAINTENANCE AND CONSTRUCTION PROJECTS FOR PERIOD OCTOBER 1, 2024 THROUGH SEPTEMBER 30, 2025 REQUEST FOR PROPOSAS (P-46-2024) ADDITIONAL PROPOSAL OF SERVICES AND FEE SCHEDULE

I. Soil Inspection and Testing

Laboratory Analysis:

(a)	Gradation (sieve analysis): A.S.T.M. D-422 w/ Hydrometer	per sample	\$ <u>185.00</u>
(b)	Gradation (sieve analysis): A.S.T.M. D-422 w/o Hydrometer	per sample	\$ <u>95.00</u>
(c)	Gradation (wet sieve analysis): A.S.T.M. D-1140.	per sample	\$ <u>95.00</u>
(d)	Atterberg Limits: A.S.T.M. D-4318	per sample	\$ <u>100.00</u>
(e)	Water Moisture Content: A.S.T.M. D-2216	per sample	\$ <u>35.00</u>
(f)	Organic Content Determination	per sample	\$ <u>75.00</u>
(g)	Moisture-Density Relations (Compaction)		
	Standard Proctor: A.S.T.M. D-698	per sample	\$ <u>195.00</u>
	Modified Proctor: A.S.T.M. D-1557	per sample	\$ <u>195.00</u>
(h)	Specific Gravity for Soils: A.S.T.M. D-854	per sample	\$ <u>135.00</u>
(i)	NJDOT Top Soil Analysis	per sample	\$ <u>275.00</u>
(j)	Classification of Soils: A.S.T.M. D-2487.	per sample	\$ <u>95.00</u>
(k)	Transportation of samples	per trip	\$ <u>65.00</u>

Geotechnical Field Inspection:

Observation of structural fill placement and nuclear density testing in specific areas to evaluate earthwork and to ensure compaction obtained is in accordance with A.S.T.M. D-2922/D-3017

Verify that bearing capacities of soils at footing sub-grades meet or exceed design parameters through correlation of soil boring data and reference to approved project specifications/drawings per day \$ 480.00

PROFESSIONAL SERVICES:

A. Consultation services by Registered Professional Engineer, Licensed in the State of New Jersey per hour \$ 140.00