

Environmental Consulting, Geotechnical Consulting & Construction Materials Testing Effective: September 1, 2016

TECHNICAL SERVICES

Engineering Services for preliminary reconnaissance, boring layout, delayed water levels, backfilling of borings, evaluation, field supervision, analysis, recommendations, reporting and consultation field inspection, report review, consultation, special inspection submittal preparation, attend pre-construction and progress meetings. Test evaluation, contract administration and supervision of laboratory/field personnel will be billed approximately ½-hour project engineer time per report.

Certified Industrial Hygienist Senior Engineer/Geologist/Scientist Project Engineer/Manager/Geologist/Scientist Staff Engineer/Geologist/Scientist Staff Air Quality Specialist Environmental Technician Certified Asbestos/Lead Designer Certified Asbestos Management Planner Certified Lead Risk Assessor Certified Asbestos/Lead Inspector CADD Clerical Principal Consultant Chief Engineer Travel. Engineering Technician	Per Hour	\$ 145.00 \$ 118.00 \$ 92.00 \$ 80.00 \$ 80.00 \$ 57.00 \$ 95.00 \$ 93.50 \$ 60.00 \$ 58.00 \$ 50.00 \$ 163.00 \$ 194.00 \$ 0.78 \$ 57.00
DRILLING Mobilization and moving of drilling equipment on and off site each way a. Rig (per mile)	Per Mile Minimum Per Day Per Mile	\$ 4.90 \$ 365.00 \$ 60.00 \$ 0 .78
GEOPHYSICAL EQUIPMENT ReMi – Seismic Analysis/Rock-Profile Equipment Service Truck	Per Day	\$2,700.00

Soil sampling as required with split-barrel sampler or thin wall tube (Shelby tube not included):

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DEPTH RANGE	UNIT CHARGES		
0-25	\$19.00 per sample		
25-50	\$25.00 per sample		
50-100	\$32.00 per sample		
Shelby Tubes		Each	\$ 21.00
•		Per Boring	\$192.00
	appropriate)	PLF	\$ 3.00
For wash boring add		Per Foot	\$ 4.00
Cost of special equipment or pe	rmits for moving		
drilling equipment on or	about the site	At cost plus 2	20%
Standby setup time per hole in e	excess of ½-hour	Per Hour	\$104.00



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CONSTRUCTION PERSONNEL/FIELD SERVICES Engineering Technician: Asphaltic Concrete Field Testing Concrete Sampling/Testing Soil - In-Place Density Testing Sample Pick-Up/Preparation	Per Hour	\$ 52.00
Senior Engineering Technician: Concrete/Asphalt Batch Plant Inspection		
Concrete Tilt-up Panel Inspection		
Drilled Pier/Pile Inspection		
Drill & Epoxy/Anchor Bolt Inspection		
Fireproofing Inspection		
Masonry Inspection		
Post-Tension Inspection		
Reinforcing Steel Inspection		
Shallow Footing and Subgrade Inspection		
Soil Fill Control/Site Observation Inspection		
State Certified (KDOT) Sampling/Field Testing	Per Hour	\$ 58.00
Structural Steel Inspector/Certified Welding Inspector:	Danillana	Ф 00.00
Visual Weld Inspection	Per Hour Per Hour	\$ 90.00 \$ 90.00
Bolt Torque VerificationShear Stud Verification	Per Hour	\$ 90.00
Ferroscan Operator	Per Hour	\$ 70.00
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LABORATORY TESTING SERVICES		
LABORATORY TESTING SERVICES Soils:		
	Each	\$ 98.00
Soils: Atterberg Limits Determination (PI)	Each Each	\$ 77.00
Soils: Atterberg Limits Determination (PI)		
Soils: Atterberg Limits Determination (PI)	Each Each	\$ 77.00 \$ 9.50
Soils: Atterberg Limits Determination (PI)	Each Each Each	\$ 77.00 \$ 9.50 \$ 156.00
Soils: Atterberg Limits Determination (PI)	Each Each Each Each	\$ 77.00 \$ 9.50 \$ 156.00 \$ 172.00
Soils: Atterberg Limits Determination (PI)	Each Each Each Each Each	\$ 77.00 \$ 9.50 \$ 156.00 \$ 172.00 \$ 68.00
Soils: Atterberg Limits Determination (PI)	Each Each Each Each Each Each	\$ 77.00 \$ 9.50 \$ 156.00 \$ 172.00 \$ 68.00 \$ 52.00
Soils: Atterberg Limits Determination (PI)	Each Each Each Each Each Each	\$ 77.00 \$ 9.50 \$ 156.00 \$ 172.00 \$ 68.00 \$ 52.00 \$ 52.00
Soils: Atterberg Limits Determination (PI)	Each Each Each Each Each Each Each Each	\$ 77.00 \$ 9.50 \$ 156.00 \$ 172.00 \$ 68.00 \$ 52.00 \$ 52.00 \$ 252.00
Soils: Atterberg Limits Determination (PI)	Each Each Each Each Each Each Each Each	\$ 77.00 \$ 9.50 \$ 156.00 \$ 172.00 \$ 68.00 \$ 52.00 \$ 52.00 \$ 252.00 \$ 10.50
Soils: Atterberg Limits Determination (PI)	Each Each Each Each Each Each Each Each	\$ 77.00 \$ 9.50 \$ 156.00 \$ 172.00 \$ 68.00 \$ 52.00 \$ 52.00 \$ 252.00 \$ 10.50 \$ 6.50
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Soils: Atterberg Limits Determination (PI)	Each Each Each Each Each Each Each Each	\$ 77.00 \$ 9.50 \$ 156.00 \$ 172.00 \$ 68.00 \$ 52.00 \$ 52.00 \$ 252.00 \$ 10.50 \$ 6.50 \$ 52.00 \$ 1,248.00
Soils: Atterberg Limits Determination (PI)	Each Each Each Each Each Each Each Each	\$ 77.00 \$ 9.50 \$ 156.00 \$ 172.00 \$ 68.00 \$ 52.00 \$ 252.00 \$ 10.50 \$ 6.50 \$ 52.00 \$ 156.00 \$ 1,248.00 \$ 338.00
Soils: Atterberg Limits Determination (PI)	Each Each Each Each Each Each Each Each	\$ 77.00 \$ 9.50 \$ 156.00 \$ 172.00 \$ 68.00 \$ 52.00 \$ 252.00 \$ 10.50 \$ 6.50 \$ 52.00 \$ 156.00 \$ 1,248.00 \$ 338.00
Soils: Atterberg Limits Determination (PI)	Each Each Each Each Each Each Each Each	\$ 77.00 \$ 9.50 \$ 156.00 \$ 172.00 \$ 68.00 \$ 52.00 \$ 252.00 \$ 10.50 \$ 6.50 \$ 52.00 \$ 156.00 \$ 1,248.00 \$ 338.00 \$ 416.00
Soils: Atterberg Limits Determination (PI)	Each Each Each Each Each Each Each Each	\$ 77.00 \$ 9.50 \$ 156.00 \$ 172.00 \$ 68.00 \$ 52.00 \$ 52.00 \$ 10.50 \$ 6.50 \$ 52.00 \$ 156.00 \$ 1,248.00 \$ 338.00 \$ 416.00 \$ 83.00
Soils: Atterberg Limits Determination (PI)	Each Each Each Each Each Each Each Each	\$ 77.00 \$ 9.50 \$ 156.00 \$ 172.00 \$ 68.00 \$ 52.00 \$ 52.00 \$ 10.50 \$ 6.50 \$ 52.00 \$ 156.00 \$ 1,248.00 \$ 338.00 \$ 416.00 \$ 83.00 \$ 67.00



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Permeability			
a. Falling head		\$	
b. Constant head	Each	\$	442.00
Triaxial shear a. Unconsolidated-undrained	Per Point	\$	203.00
b. Consolidated-undrained			494.00
c. Consolidated-drained (Granular So			442.00
Remold Sample Preparation	• ,	\$	
Concrete:			
Calcium Chloride Vapor Emission Test Kit	Test	\$	31.00
Concrete Compression		\$	15.00
Concrete Compression (Contractor made)		\$	29.00
Concrete Compression of Drilled Core		\$ \$ \$	35.00
Flexural Strength of Concrete (Beams)		\$	45.00
Floor Flatness Survey (\$400/day minimum)		\$	0.06
Length Change of Harden Concrete (C157)		\$	296.00
Maturity Meter Curve (Cylinders made at batch pla	ant) Each	\$	875.00
Maturity Meter Curve (Cylinders made in Laborato	ory) Each	\$	1,375.00
1-Point Concrete Mix Design Trial Batch Verificati		\$	700.00
Time of Set (Initial and Final)	Each	\$	625.00
Trim Specimen (if necessary)	Each	\$	45.00
Aggregate Materials:			
Acid Chloride Ion	Test	\$	76.00
Alkali Reactivity of Cement-Agg. Mortar Bar Metho		\$	925.00
Compressive Strength of Intact Rock Core Specir		\$	70.00
Deleterious (shale/soft-friable) (C142)		\$ \$ \$ \$ \$ \$ \$	45.00
Effect of Organic Impurities in Fine Agg. On Stren		\$	490.00
Fine Aggregate Angularity (AASHTO T304)		\$	70.00
Freeze-Thaw		\$	175.00
Gradation (C136)		\$	70.00
Gradation (C136) Coarse Aggregate Large Size (> 1") Test	\$	125.00
LA Abrasion (C131)		\$	135.00
LA Abrasion - Large Aggregate (C535)		\$	155.00
Light Weight Particles (C123)	Test	\$	45.00
Materials Finer than #200 in Aggregates (C117)		\$	45.00
Methylene Blue (AASHTO T330)		\$	54.00
Micro Deval (AASHTO T327)		\$	213.00
Moisture Content (C566)		\$	9.50
Organic Impurities in Sand (C40)		\$	46.00
Particle Shape – Flat & Elongated (CRD C120) (3		\$	44.00
Petrographic Analysis of Aggregates (C295) (plus			1,405.00
Rapid Chloride Ion (plus shipping)	Test	\$	665.00
Sand Equivalency Value of Soils and Fine Agg (D		\$	65.00 45.00
Scratch Hardness Soft Particles (C235)		\$ \$	45.00 70.00
Sulfate Soundness – Magnesium or Sodium (C88		\$ \$	70.00 145.00
Unit Weight of Aggregate (C29)		Ф \$	35.00
Water Soluble Chloride (plus shipping)		\$	52.00
Tator Colubio Critorido (pido Gripping)	1000	Ψ	52.00



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Asphaltic Concrete Testing:		_	
Asphalt Core Density	Test	\$	12.50
Asphalt Extraction and Gradation	Test	\$	182.00
Asphalt Marshall Density (includes molding of 3 specimens)	Set of 3	\$	140.00
Asphalt Marshall Stability and Flow	Set of 3	\$	160.00
Gyratory Pill Compaction with Density (150 mm)	Test	\$	110.00
Gyratory Pill Compaction with Density (100 mm)	Test	\$	82.00
Marshall Pill Compaction	Test	\$	12.50
Maximum Theoretical Specific Gravity (Rice Test)	Test	\$	114.00
Tensile Strength Ratio (TSR)	Test	Ф	380.00
Masonry Product Testing:			
Dry Shrinkage (3 per set) (ASTM C426)	Per Set	\$	430.00
Grain Size Analysis (ASTM C136)	Test	\$	70.00
Minus No. 200 Sieve (ASTM C117)	Test	\$	45.00
Shotcrete Compressive Strength Testing	Test	\$	35.00
Specific Gravity (ASTM C127, C128)	Test	\$	70.00
Grout:			
Compressive Strength: 3"x3"x6" Prisms/2"x2" cubes (ASTM C1019)	Test	\$	18.50
Dry Package Mix (mixing, flow test and 6 compr.strength samples)	Each		234.00
Mix Design (computations, mixing, slump and molding)	Each	\$	325.00
Mortar:			
Compressive Strength: 2" x 2" Cubes	Test	\$	12.50
Dry Package Mix (mixing, flow test & 6 compr.strength samples)	Each	\$	
Water Retention	Test	\$	35.00
Air Test (specific gravity not included)	Test		47.00
Mix Design (computations, mixing, flow test and molding)	Test	\$	365.00
Concrete Masonry Units:			
Compressive Strength Testing:	- .	•	40.00
8" & 12" Block, ASTM C140	Test	\$	40.00
8" & 12" Hollow Prism	Test	\$	75.00
8" & 12" Grouted Prism	Test	\$	85.00
Measuring, Moisture Content and Absorption (3 per set)(ASTM C140)	Per Set	\$	179.00
Fireproofing:			
Adhesion/Cohesion	Test	\$	42.00
Density	Test	\$	42.00
EQUIPMENT:			
Concrete/Asphalt Coring Equipment			
Diamond bit core barrel	Per Inch	\$	9.50
Coring Machine	Per Day	\$	200.00
Hole Patch (non-shrink grout)	Cost Plus	25%	
Ferroscan	Per Day	\$	175.00
Nuclear Density Gauge (price included in technician hourly rate)	Per Day	\$	10.50
Skidmore-Wilhelm Equipment	Per Day	\$	170.00
REIMBURSABLE EXPENSES			
Drilling/Geoprobe	Quoted P	er Pro	piect
Analytical Testing (Wastestream, Soil, Water)	Quoted P		
Asbestos & Lead Sample Analysis	Quoted P		
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REMARKS

- 1. Unit prices attached are in effect for twelve (12) months from the date of this proposal. Services and fees not listed above will be quoted upon request. It is assumed that the site is legally and physically accessible to the drilling equipment without additional cost to Professional Service Industries, Inc.
- 2. The fees apply only to geotechnical/foundation borings in areas which are not contaminated by hazardous constituents. Fees for hazardous drilling conditions will be in accordance with the Environmental Drilling Schedule of Fees and Services. Testing on contaminated samples will be performed at stated fee plus the cost of protective clothing and a 25% minimum additional charge for special handling. Contaminated soil samples will be returned to the client upon completion of testing at shipping cost + 15%, including any necessary permit costs. Surcharges for laboratory services during overtime hours for expedited results may apply.
- 3. Field services will be charged on a whole hourly basis from the time the engineer or technician leaves the office until he/she returns from the project. Four (4) hour minimum per trip and a vehicle charge of \$0.85 a mile will be added. A per diem charge of \$125.00 per man, per day will be added, if applicable. Rates involving mileage (including transportation, mobilization, vehicle, and trip charges) are subject to change based upon increases in the national average gasoline price. As necessary, a fuel surcharge, equal to 2% of the total trip charge (\$5.00 minimum) will be added to each invoice to offset rising fuel prices. Fuel costs will be evaluated each month prior to billing with invoices adjusted as necessary on a project by project basis. Scheduling or cancellation of field testing and observation services is required no less than the working day prior to the date services are to be performed. Services cancelled without advance and/or inadequate notice will be assessed a minimum 3 hour charge.
- 4. The prices listed above include up to three copies of the report distributed in accordance with your instruction. Additional copies will be billed at the rate of \$0.35 per sheet. Wet stamped copies will be charged \$50.00 per additional report.
- 5. Overtime rates are applicable for services performed in excess of 8 hours per day Monday through Friday, before 7:00 AM or after 5:00 PM, and for all hours worked on Saturdays, Sundays and holidays. The overtime rate is 1.5 times the applicable hourly unit rate. Surcharges for laboratory services during overtime hours or for expedited results may apply.
- 6. Transportation and per diem are charged at the applicable rates. Rates involving mileage (including transportation, mobilization, vehicle, and trip charges) are subject to change based upon increases in the national average gasoline price. A fuel surcharge shall be applied to invoices to offset the increase in fuel prices. Increases shall be made no more often than monthly.
- 7. Unless noted otherwise: Concrete cylinders are made in accordance with ASTM C-31(4x8 cylinders) except for Section 10.1.2. Asphalt field compaction tests are performed in accordance with ASTM D-2950 except Section 3.5 unless noted otherwise. Asphalt extraction data from ASTM D-6307 Method B except Section 12.
- 8. For all PSI services, a project management/engineering review charge will be billed for all reports issued for the scheduling/supervision of personnel and the evaluation/review of data and reports.
- 9. A project set-up charge of \$125.00 applies to each project.
- 10. A final inspection charge of a minimum of two hours at a Project Manager rate applies to all special inspection projects.