

COUNCIL ACTION FORM

SUBJECT: CONSTRUCTION TESTING CONTRACT FOR AMES PUBLIC LIBRARY

BACKGROUND:

Allender Butzke Engineers, Inc. (ABE), of Urbandale, Iowa, was selected by the architect as a subcontractor last January to provide geotechnical engineer consulting for improvements to the Ames Public Library. It is common practice to engage the independent testing firm that made the original recommendations to carry out the evaluation of actual job site conditions.

Now that construction is about to commence, the Library Board would like to hire ABE as an owner's independent consultant for testing during construction. The services to be performed by ABE include compaction testing, structural steel inspection, fire proofing inspection, anchoring inspection as well as concrete testing. ABE has submitted a proposal that includes unit prices for work that will be provided, as required by the contract documents. The estimated fee of \$94,423.10 represents a "not to exceed" amount. The project budget estimated these services to be \$90,000. It should be noted that the Library also received a proposal from Terracon Consultants, Inc., the firm that conducted the Library's environmental site survey and is currently monitoring the abatement of hazardous materials. However, Terracon's proposal was incomplete.

The Library Board requests that the City Council award a contract for construction testing services to Allender Butzke Engineers, Inc., of Urbandale, Iowa, in an amount not to exceed \$94,423.10. Funds are available from General Obligation bonds sold in July 2012 for the Renovation and Expansion of the Ames Public Library.

ALTERNATIVES:

1. Award the contract for construction testing services to Allender Butzke Engineers, Inc., of Urbandale, Iowa, in an amount not to exceed \$94,423.10.
2. Do not award the contract at this time.

MANAGER'S RECOMMENDED ACTION:

In order to maintain a single line of responsibility, the firm providing geotechnical information and recommendations should be engaged to conduct field observations and testing during construction. The proposal submitted by Allender Butzke Engineers is in order and the Library's architects have confirmed that all services have been identified correctly.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, thereby awarding a contract for construction testing services for the Ames Public Library Renovation and Expansion Project to Allender Butzke Engineers, Inc., of Urbandale, Iowa, in an amount not to exceed \$94,423.10.



623 East Lincoln Way
Ames, Iowa 50010
Phone: (515) 268-3346
Fax: (515) 268-3349

MEMO

Date: December 10, 2012

To: Lynne Carey

From: Brad Heemstra

Project: Ames Public Library Renovation and Expansion

Subject: **Construction Testing**

Remarks:

Allender Butzke Engineers Inc. from Urbandale provided the geotechnical investigation report and soil recommendations for the design team on the Library project. It is common practice to engage the same firm for construction testing for single source responsibility between the geotechnical recommendations and evaluating actual conditions on the project during construction.

Allender Butzke has submitted the attached proposal dated December 6, 2012 for all testing specified in the construction documents. We have reviewed this proposal with Kate Michaud from MS&R Architects to confirm all testing is identified correctly.

Allender Butzke's proposal for professional services is based on unit prices for services performed. The total cost may vary based on the actual quantity of tests completed. The unit price rates appear reasonable compared to other central Iowa testing firms.

It is our recommendation that the Library Board and the City Council accept this proposal from Allender Butzke Engineers for construction testing and issue a purchase order accordingly.



STANDARD AGREEMENT FOR PROFESSIONAL SERVICES

PROJECT NAME: Ames Public Library **PP:** 129251
PROJECT ADDRESS: 515 Douglas Avenue
Ames, Iowa 50010
CLIENT: City of Ames c/o Integrity Construction Attn: Mr. Brad Heemstra
ADDRESS: 623 E. Lincoln Way
Ames, Iowa 50010

SCOPE: Perform the field and laboratory test and observation services listed on the enclosed Proposal No. 129251 during construction of this project. Services will be provided on a part time basis with project control and scheduling (24 hour notice) the responsibility of the contractor. Additional services are available upon request.

COMPENSATION TERMS: The services will be invoiced on the basis of the unit prices listed on the enclosed Proposal No. 129251. The estimated total is for example budget purposes only and the final cost may be lower or higher based on the actual amount of services provided, which is not under ABE's control. The various contractors primarily decide when they need tests, how many tests are required to represent their work, and if we need to provide services during overtime hours (after normal weekday business hours, weekends, and holidays). It is understood that, unless otherwise arranged in writing, verbal requests for services that exceed the estimated total amount are considered authorization to provide the services and receive payment for same. Additional services are available at the current ABE fee schedule rates.

Services covered by the Agreement will be performed in accordance with the GENERAL CONDITIONS stated on the following page and any attachments or schedules. This Agreement supersedes all prior agreements and understandings and may only be changed by written amendment executed by both parties.

PROPOSED BY ABE INC.

By: Keith Kimsey
Keith Kimsey
Title: Staff Engineer
Date: 12/6/2012

ACCEPTED FOR CLIENT

By: _____
Printed Name
Title: _____
Date: _____

PLEASE SIGN AND RETURN ACCEPTANCE AGREEMENT TO OUR OFFICE, THANK YOU!

1. PARTIES AND SCOPE OF WORK: Allender Butzke Engineers (hereinafter referred to as "ABE") shall perform the work as set forth in ABE's proposal, the client's acceptance thereof if accepted by ABE and these General Conditions. "Client" refers to the person or business entity ordering the work to be done by ABE. If the client is ordering the work on behalf of another, the client represents and warrants that the client is the duly authorized agent of said party for the purpose of ordering and directing said work. Unless otherwise stated in writing, the client assumes sole responsibility for determining whether the quantity and the nature of the work ordered by the client is adequate and sufficient for the client's intended purpose. Client shall communicate these General Conditions to each and every third party to whom the client transmits any part of ABE's work. ABE shall have no duty or obligation to any third party greater than that set forth in ABE's proposal, client's acceptance thereof and these General Conditions. The ordering of work from ABE shall constitute acceptance of the terms of ABE's proposal and these General Conditions.

2. TESTS AND INSPECTIONS: Client shall cause all tests and inspections of the site, materials and work performed by ABE or others to be timely and properly performed in accordance with the plans, specifications and contract documents and ABE's recommendations. No claims for loss, damage or injury shall be brought against ABE by client or any third party unless all tests and inspections have been so performed and unless ABE's recommendations have been followed. Client agrees to indemnify, defend and hold ABE, its officers, employees and agents harmless from any and all claims, suits, losses, costs and expenses, including, but not limited to, court costs and reasonable attorney's fees in the event that all such tests and inspections are not so performed or ABE's recommendations are not so followed except to the extent that such failure is the result of the negligence, willful or wanton act or omission of ABE, its officers, agents or employees, subject to the limitation contained in paragraph 9.

3. SCHEDULING OF WORK: The services set forth in ABE's proposal and client's acceptance will be accomplished in a timely, workmanlike and professional manner by ABE personnel at the prices quoted. If ABE is required to delay commencement of the work or if, upon embarking upon its work, ABE is required to stop or interrupt the progress of its work as a result of changes in the scope of the work requested by the client, to fulfill the requirements of third parties, interruptions in the progress of construction, or other causes beyond the direct reasonable control of ABE, additional charges will be applicable and payable by client.

4. ACCESS TO SITE: Client will arrange and provide such access to the site as is necessary for ABE to perform the work. ABE shall take reasonable measures and precautions to minimize damage to the site and any improvements located thereon as the result of its work or the use of its equipment; however, ABE has not included in its fee the cost of restoration of damage which may occur. If client desires or requires ABE to restore the site to its former condition, upon written request ABE will perform such additional work as is necessary to do so and client agrees to pay ABE the cost thereof.

5. CLIENT'S DUTY TO NOTIFY ENGINEER: Client represents and warrants that he has advised ABE of any known or suspected hazardous materials, utility lines and pollutants at any site at which ABE is to do work hereunder, and unless ABE has assumed in writing the responsibility of locating subsurface objects, structures, lines or conduits, client agrees to defend, indemnify and save ABE harmless from all claims, suits, losses, costs and expenses, including reasonable attorney's fees as a result of personal injury, death or property damage occurring with respect to ABE's performance of its work and resulting to or caused by contact with subsurface or latent objects, structures, lines or conduits where the actual or potential presence and location thereof was not revealed to ABE by client.

6. RESPONSIBILITY: ABE's work shall not include determining, supervising or implementing the means, methods, techniques, sequences or procedures of construction. ABE shall not be responsible for evaluating, reporting or affecting job conditions concerning health, safety or welfare. ABE's work or failure to perform same shall not in any way excuse any contractor, subcontractor or supplier from performance of its work in accordance with the contract documents. ABE has no right or duty to stop the contractor's work.

7. SAMPLE DISPOSAL: Unless otherwise agreed, test specimens or samples will be disposed immediately upon completion of the test. All drilling samples or specimens will be disposed thirty (30) days after submission of ABE's report.

8. PAYMENT: Client shall be invoiced as work is completed and reported, either periodically or at end of project. Client agrees to pay each invoice within thirty (30) days of its receipt. Client further agrees to pay interest on all amounts invoiced and not paid or objected to for valid cause in writing within said thirty (30) day period at the rate of eighteen (18) percent per annum (or the maximum interest rate permitted under applicable law), until paid. Client agrees to pay ABE's cost of collection of all

amounts due and unpaid after sixty (60) days, including court costs and reasonable attorney's fees. ABE shall not be bound by any provision or agreement requiring or providing for arbitration of disputes or controversies arising out of this agreement, and provision wherein ABE waives any rights to a mechanics' lien, or any provision conditioning ABE's right to receive payment for its work upon payment to client by any third party. These General Conditions are notice, where required, that ABE shall file a lien whenever necessary to collect past due amounts. Failure to make payment within 30 days of invoice shall constitute a release of ABE from any and all claims which client may have, either in tort or contract, and whether known or unknown at the time.

9. STANDARD OF CARE: ABE'S SERVICES WILL BE PERFORMED, ITS FINDINGS OBTAINED AND ITS REPORTS PREPARED IN ACCORDANCE WITH THIS AGREEMENT AND WITH GENERALLY ACCEPTED PRINCIPLES AND PRACTICES. IN PERFORMING ITS PROFESSIONAL SERVICES, ABE WILL USE THAT DEGREE OF CARE AND SKILL ORDINARILY EXERCISED UNDER SIMILAR CIRCUMSTANCES BY MEMBERS OF ITS PROFESSION. STATEMENTS MADE IN ABE REPORTS ARE OPINIONS BASED UPON ENGINEERING JUDGMENT AND ARE NOT TO BE CONSTRUED AS REPRESENTATIONS OF FACT.

10. LIMITATION OF LIABILITY: SHOULD ABE OR ANY OF ITS PROFESSIONAL EMPLOYEES BE FOUND TO HAVE BEEN NEGLIGENT IN THE PERFORMANCE OF ITS WORK, OR TO HAVE MADE AND BREACHED ANY EXPRESS OR IMPLIED WARRANTY, REPRESENTATION OR CONTRACT, CLIENT, ALL PARTIES CLAIMING THROUGH CLIENT AND ALL PARTIES CLAIMING TO HAVE IN ANY WAY RELIED UPON ABE'S WORK AGREE THAT THE MAXIMUM AGGREGATE AMOUNT OF THE LIABILITY OF ABE, ITS OFFICERS, EMPLOYEES, AND AGENTS SHALL BE LIMITED TO \$20,000.

11. INDEMNITY: Subject to the foregoing limitations, ABE agrees to indemnify and hold client harmless from and against any and all claims, suits, costs and expenses including reasonable attorney's fees and court costs arising out of ABE's negligence to the extent of ABE's negligence. Client shall provide the same protection to the extent of its negligence. In the event that client or client's principal shall bring any suit, cause of action, claim or counterclaim against ABE, the party initiating such action shall pay to ABE the costs and expenses incurred by ABE to investigate, answer and defend it, including reasonable attorney's and witness fees and court costs to the extent that ABE shall prevail in such suit.

12. TERMINATION: This Agreement may be terminated by either party upon seven day's prior written notice. In the event of termination, ABE shall be compensated by client for all services performed up to and including the termination date, including reimbursable expenses, and for the completion of such services, records and reports as are necessary to place ABE's files in order and/or protect its professional reputation.

13. WITNESS FEES: ABE's employees shall not be retained as expert witnesses except by separate, written agreement. Client agrees to pay ABE's legal expenses, administrative costs and fees pursuant to ABE's then current fee schedule for ABE to respond to any subpoena.

14. HAZARDOUS MATERIALS: Nothing contained within this agreement shall be construed or interpreted as requiring ABE to assume the status of an owner, operator, generator, storer, transporter, treater or disposal facility as those terms appear within RCRA or within any Federal or State statute or regulation governing the generation, transportation, treatment, storage and disposal of pollutants. Client assumes full responsibility for compliance with the provisions of RCRA and any other Federal or State statute or regulation governing the handling, treatment, storage and disposal of pollutants.

15. PROVISIONS SEVERABLE: In the event any of the provisions of these General Conditions should be found to be unenforceable, it shall be stricken and the remaining provisions shall be enforceable.

16. ENTIRE AGREEMENT: This agreement constitutes the entire understanding of the parties, and there are no representations, warranties or undertakings made other than as set forth herein. This agreement may be amended, modified or terminated only in writing, signed by each of the parties hereto.

PRELIMINARY ESTIMATE

Page 1 of 4

ALLENDER BUTZKE ENGINEERS INC.

3660 109th Street - Urbandale, Iowa 50322 - Phone No. 515-252-1979

TO: City of Ames
c/o Integrity Construction
623 E Lincoln Way
Ames, Iowa 50010

Date: 12/06/2012
Prop.# 129251

Attn: Mr. Brad Heemstra

RE: Construction Testing Services - Ames Public Library
Ames, Iowa

Description of Services	Amount	Unit Price	Total
*Foundation Pile Installation & Testing Observations - ABE			
Senior Technician	8.0 hrs	\$59.00 /Hour	\$472.00
Transportation Charges	84 miles	\$0.72 /Mile	\$60.48
Compressive Strength of 2x2 Cubes	6.0 tests	\$15.50 /Test	\$93.00
2"x2" Disposable Cube Molds	6.0 ea	\$0.82 /each	\$4.92
<i>*Assumes activity duration of 10 days including pile testing. Reference 316316</i>		Per Trip	\$630.40
		Trips	10
		Sub Total	\$6,304.00
Compacted Fill Part Time Tests - Site Work and Backfills - ABE			
Technician III	3.5 hrs	\$47.00 /Hour	\$164.50
Transportation Charges	84 miles	\$0.72 /Mile	\$60.48
Nuclear moisture/density gauge	5 tests	\$11.50 /Test	\$57.50
<i>Reference 312000</i>		Per Trip	\$282.48
		Trips	20
		Sub Total	\$5,649.60
Laboratory Testing of Soil - ABE			
Standard Proctor (ASTM D698)	6 tests	\$134.00 /Test	\$804.00
<i>Reference 312000</i>		Sub Total	\$804.00
Field Concrete Inspection (Including Reinforcing) - ABE			
Technician III	4.0 hrs	\$47.00 /Hour	\$188.00
Transportation Charges	84 miles	\$0.72 /Mile	\$60.48
<i>Reference 033000, 321313</i>		Per Trip	\$248.48
		Trips	40
		Sub Total	\$9,939.20
*Concrete Test Cylinder Pick-Up - ABE			
Technician III	2.0 hrs	\$47.00 /Hour	\$94.00
Transportation Charges	84 miles	\$0.72 /Mile	\$60.48
<i>*Assumes other cylinders picked up during other activities onsite</i>		Per Trip	\$154.48
		Trips	20
		Sub Total	\$3,089.60

PRELIMINARY ESTIMATE

Page 2 of 4

ALLENDER BUTZKE ENGINEERS INC.

3660 109th Street - Urbandale, Iowa 50322 - Phone No. 515-252-1979

TO: City of Ames
c/o Integrity Construction
623 E Lincoln Way
Ames, Iowa 50010

Date: 12/06/2012
Prop.# 129251

Attn: Mr. Brad Heemstra

RE: Construction Testing Services - Ames Public Library
Ames, Iowa

Description of Services	Amount	Unit Price	Total
Laboratory Testing of Concrete - ABE			
Compressive Strength of Cylinder ASTM C39	3 tests	\$15.50 /Test	\$46.50
4" x 8" cylinder molds	3 ea	\$1.90 /Ea.	\$5.70
Tax on cylinder molds 4" x 8"	3 ea	\$0.114 /Ea.	\$0.34
<i>Reference 033000, 321313</i>		Per Set	\$52.54
		Sets	50
		Sub Total	\$2,627.10
Floor Flatness/Levelness Testing - ABE			
*Minimum charge for up to 20,000 sf/trip	1.0 ea	\$780.00 /each	\$780.00
Transportation Charges	84 miles	\$0.72 /Mile	\$60.48
<i>*Areas in excess of 20,000 sf add \$0.06/sf over 20,000 sf</i>		Per Trip	\$840.48
<i>Reference 033000</i>		Trips	4
		Sub Total	\$3,361.92
Proof Roll Observations and Onsite Engineering Consultations - ABE			
Staff Engineer III	3.5 hrs	\$100.00 /Hour	\$350.00
Transportation Charges	84 miles	\$0.72 /Mile	\$60.48
<i>Proof Roll Reference 312000 "Subgrade Stability"</i>		Per Trip	\$410.48
		Trips	20
		Sub Total	\$8,209.60
Structural Steel - Visual Field Observations Welds & Bolts - ABE			
NDT Technician	4.0 hrs	\$93.00 /Hour	\$372.00
Transportation Charges	84 miles	\$0.72 /Mile	\$60.48
<i>Reference 051200, 052100, 053100, 054000</i>		Per Trip	\$432.48
		Trips	10
		Sub Total	\$4,324.80
Masonry Observation & Testing (Grout) - ABE			
Technician III	4.0 hrs	\$47.00 /Hour	\$188.00
Transportation Charges	84 miles	\$0.72 /Mile	\$60.48
Compressive Strength of Pinwheel	3 tests	\$37.00 /Test	\$111.00
<i>Reference 042000</i>		Per Trip	\$359.48
		Trips	20
		Sub Total	\$7,189.60
Cold Fluid-Applied Waterproofing Thickness - ABE			
NDT Technician	3.0 hrs	\$93.00 /Hour	\$279.00
Transportation Charges	84 miles	\$0.72 /Mile	\$60.48
<i>Reference 071416</i>		Per Trip	\$339.48
		Trips	2
		Sub Total	\$678.96

PRELIMINARY ESTIMATE

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ALLENDER BUTZKE ENGINEERS INC.

3660 109th Street - Urbandale, Iowa 50322 - Phone No. 515-252-1979

TO: City of Ames
c/o Integrity Construction
623 E Lincoln Way
Ames, Iowa 50010

Date: 12/06/2012
Prop.# 129251

Attn: Mr. Brad Heemstra

RE: Construction Testing Services - Ames Public Library
Ames, Iowa

Description of Services	Amount	Unit Price	Total
Applied Fireproofing Thickness, Density, Pull Test - ABE			
NDT Technician Thickness, Density Sample, Pull Test Set-up	6.0 hrs	\$93.00 /Hour	\$558.00
Pull Test Adhesive (1 Can)	1.0 ea	\$17.00 /ea	\$17.00
NDT Technician Pull-Test (Next day minimum)	3.0 hrs	\$93.00 /Hour	\$279.00
Transportation Charges	168 miles	\$0.72 /Mile	\$120.96
<i>Reference 078100</i>		Per Trip	\$974.96
		Trips	4
		Sub Total	\$3,899.84
Intumescent Fireproofing Thickness - ABE			
NDT Technician	8.0 hrs	\$93.00 /Hour	\$744.00
Ultrasonic Gauge Equipment	1.0 day	\$165.00 /day	\$165.00
Transportation Charges	84 miles	\$0.72 /Mile	\$60.48
<i>Reference 078123</i>		Per Trip	\$969.48
		Trips	1
		Sub Total	\$969.48
Acoustical Panel Ceiling Anchor Testing - ABE			
NDT Technician	4.0 hrs	\$93.00 /Hour	\$372.00
Transportation Charges	84 miles	\$0.72 /Mile	\$60.48
<i>Reference 095113</i>		Per Trip	\$432.48
		Trips	4
		Sub Total	\$1,729.92
Storefront Testing - Element			
Mock-up AAMA 501.2, ASTM E783, ASTM E1105	1.0 ea	\$2,160.00 /each	\$2,160.00
Field ASTM 1105, AAMA 501.2, ASTM E783	3.0 area	\$2,160.00 /area	\$6,480.00
Element Travel	4.0 ea	\$240.00 /each	\$960.00
<i>Reference 084113</i>		Sub Total	\$9,600.00
Glazed Aluminum Curtain Wall Testing - Element			
Mock-up AAMA 501.2, ASTM E783, ASTM E1105	1.0 ea	\$3,600.00 /each	\$3,600.00
10% Work Field ASTM 1105, AAMA 501.2, ASTM E783	1.0 ea	\$3,600.00 /area	\$3,600.00
35% Work Field ASTM 1105, AAMA 501.2, ASTM E783	1.0 ea	\$3,600.00 /area	\$3,600.00
70% Work Field ASTM 1105, AAMA 501.2, ASTM E783	1.0 ea	\$3,600.00 /area	\$3,600.00
Element Travel	4.0 ea	\$240.00 /each	\$960.00
<i>Reference 084413</i>		Sub Total	\$8,160.00

PRELIMINARY ESTIMATE

ALLENDER BUTZKE ENGINEERS INC.

3660 109th Street - Urbandale, Iowa 50322 - Phone No. 515-252-1979

TO: City of Ames
c/o Integrity Construction
623 E Lincoln Way
Ames, Iowa 50010

Date: 12/06/2012

Prop.# 129251

Attn: Mr. Brad Heemstra

RE: Construction Testing Services - Ames Public Library
Ames, Iowa

Description of Services	Amount	Unit Price	Total
*Wood Window Testing - Element			
Wood Window Testing	3.0 ea	\$720.00 /each	\$2,160.00
Element Travel	1.0 ea	\$240.00 /each	\$240.00
<i>*Assumes 1 type of wood window.</i>		Per Trip	\$2,400.00
<i>Spec requires 3 windows tested per type.</i>		Trips	1
<i>Reference 085200</i>		Sub Total	\$2,400.00
*Metal Framed Skylights Testing - Element			
Skylight Testing	1.0 ea	\$480.00 /each	\$480.00
Element Travel	1.0 ea	\$240.00 /each	\$240.00
<i>*Assumes testing for 1 skylight unit.</i>		Per Trip	\$720.00
<i>Reference 086300</i>		Trips	1
		Sub Total	\$720.00
Insulated Core Metal Wall Panel Testing - Element			
Mock-up AAMA 501.2	1.0 ea	\$1,260.00 /each	\$1,260.00
Field ASTM 1105 (2 days)	1.0 ea	\$3,600.00 /each	\$3,600.00
Field AAMA 501.2	1.0 ea	\$1,260.00 /each	\$1,260.00
Element Travel	4.0 ea	\$240.00 /each	\$960.00
<i>Reference 074216</i>		Sub Total	\$7,080.00
Fluid-Applied Membrane Air Barriers-Visual Observations			
Staff Engineer III	8.0 hrs	\$100.00 /Hour	\$800.00
Transportation Charges	84 miles	\$0.72 /Mile	\$60.48
<i>Reference 072726</i>		Per Trip	\$860.48
		Trips	1
		Sub Total	\$860.48
Engineering Consultation & Administration - ABE			
Plan and Specification Review	5.0 hrs	\$100.00 /Hour	\$500.00
Engineer Review & Report Preparation(0.5hr. min./report)	55.0 hrs	\$115.00 /Hour	\$6,325.00
		Sub Total	\$6,825.00
<i>Over Time @ 1.5 * Hourly Rate</i>		Total	\$94,423.10

We emphasize that the estimated total cost listed is only an example budget based on the assumed scope we have outlined.

This is not intended as a not-to-exceed price since the scope may not accurately reflect how frequently the contractor will need us on site. The number of tests, trips, and hours on site are primarily controlled by the contractor's scheduling and performing of their construction activities. We recommend that the contractor review our estimated number of tests, trips, and the duration of time necessary on site to determine if our estimated scope is compatible with their production. The estimated budget can be amended with a revised scope. It is understood that, unless otherwise arranged in writing, verbal requests for services that exceed the estimated total amount are considered authorization to provide the services and receive payment for same.

If Allender Butzke Engineers is selected to perform the above tests, a Confirming Agreement will be sent at that time.

ALLENDER BUTZKE ENGINEERS INC.

2012 CONSTRUCTION FEE SCHEDULE

Personnel

Senior Principal Engineer (Registered)	\$149.00/hour	Supervisory Engineering Technician	\$66.00/hour
Principal Engineer (Registered)	\$129.00/hour	Senior Technician	\$59.00/hour
Project Engineer (Registered)	\$113.00/hour	Technician IV	\$51.00/hour
Staff Engineer IV	\$106.00/hour	Technician III	\$47.00/hour
Staff Engineer III	\$100.00/hour	Technician II	\$44.00/hour
Staff Engineer II	\$93.00/hour	Technician I	\$40.00/hour
Staff Engineer I	\$88.00/hour	Engineering Review & Report Preparation	\$115.00/hour
NDT Steel Inspector	\$93.00/hour	Report Preparation	\$41.00/hour

Note: Technician overtime rates are 1.5 times standard rates for hours before and after normal weekday business hours, Saturdays, Sundays, or Holidays. Two hour field services minimum for the first daily trip and one hour minimum for following trips on the same day.

Travel

Travel (Auto, Truck)*	\$0.72/mile	Per Diem/Person (Est. - Negotiated by Project)	\$140.00/day
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*Travel charges are in addition to Personnel Rates.

Equipment

Nuclear Moisture/Density Gauge	\$11.50/test	Hammer Drill*	\$45.00/day
Core Drilling Machine*	\$78.00/day	Bolt Tension Calibrator*	\$150.00/day
Generator*	\$77.00/day	Calibrated Torque Wrench*	\$56.00/day
Special Access Equipment by Customer or Cost +15%		Ultrasonic Gauge Equipment* (Paint Thickness)	\$165.00/day

*Equipment Charges are in addition to Personnel Rate. One day minimum charge is applicable.

Materials & Report Charges

Atterberg Limits (LL, PL)	\$77.00/test	Fine & Coarse Sieve Analyses	\$190.00/each
Density (Shelby Tube)	\$7.50/test	Modified Proctor ASTM D1557*	\$158.00/test
Water Content	\$7.50/test	Standard Proctor ASTM D698*	\$134.00/test
Unconfined Compression (Soil)	\$23.00/test	One Point Proctor - Standard	\$81.00/test
Fine Sieve Analysis (Washed #200 Sieve)	\$86.50/each	Fire Proofing Adhesive	\$17.00/can
Analysis of Material Finer than #200 ASTM C117 ..	\$32.00/each	Fire Proofing Foam	\$98.00/can
Coarse Sieve Analysis ASTM C136	\$106.00/each	*Addl. Charge for Coarse Aggregate Correction	\$24.50/test

Concrete and Grout Strength Test

Concrete and Grout Test Cylinders and 2" Cubes:		Flexural Strength of Concrete Beam*	\$39.00/each
Set of 3 or more	\$15.50/each	Special Capping for Irregular Surface	\$8.80/each
Set of 2	\$18.00/each	Sawing Plane Ends	\$11.30/cut
Set of 1	\$29.00/each	Disposable Cylinder Molds	\$1.90/each
"Hold" Cylinder not tested	\$15.50/each	2" x 2" Disposable Cube Molds	\$0.82/each
Grout "Pinwheels"	\$37.00/each	*Cleaning charges in addition where applicable	

Concrete Coring & Report Charges

Diamond Bit Wear:		Concrete Core Measurement (L/D) & Strength	\$50.00/core
P.C. Concrete w/Gravel	\$5.00/inch	Concrete Core 9-Point Measurement*	\$20.00/core
P.C. Concrete w/Limestone	\$4.50/inch	Non-shrink Grout Patch	\$28.00/bag
Reinforced P.C. Concrete	add \$1.30/inch	HMA Core Bulk Specific Density (field cut)	\$38.00/core
H.M.A. Concrete	\$3.50/inch	Moisture Vapor Emission Test Kit	\$23.00/kit
Concrete Coring (2 men, 4-hr minimum)	\$118.00/hour	RH Rapid Moisture Probe	\$85.00/each
		*\$115.00 minimum per report	

Floor Flatness

Minimum charge for up to 20,000 ft ² /trip	\$780.00/minimum
Additional charge for areas in excess of 20,000 ft ²	\$0.06/ft ²
Final project report (2 hour Project Engineer minimum)	Personnel Hourly

Foundation Excavation Engineer Observation

Minimum charge if no ABE Inc. Geotechnical Report is available for the building location (max. 2 trips)

Additional hourly fees will be charged after the maximum 2 trips. Additional services to remediate problem soil conditions available on request.

These prices are only applicable for the current calendar year and may be subject to adjustment on January 1st of the following year.
 Fee Schedules for **Geotechnical Exploration** and **Environmental** services available upon request.