

Municipality	L O C A L A G E N C Y	 Illinois Department of Transportation Preliminary/Construction Engineering Services Agreement For Non-Motor Fuel Tax Funds	C O N S U L T A N T	Name ECS Midwest, LLC
Township				Address 1575 Barclay Blvd.
County Lake County Div. of Transportation				City Buffalo Grove
Section 13-00000-05-EG				State Illinois

THIS AGREEMENT is made and entered into this _____ day of _____, 2013 between the above Local Agency (LA) and Consultant (ENGINEER) and covers certain professional engineering services in connection with the improvement of the above PROJECT. Non-Motor Fuel Tax Funds, allotted to the LA by the State of Illinois under the general supervision of the State Department of Transportation, hereinafter called the "DEPARTMENT", will be used entirely or in part to finance ENGINEERING services as described under AGREEMENT PROVISIONS.

WHEREVER IN THIS AGREEMENT or attached exhibits the following terms are used, they shall be interpreted to mean:

Regional Engineer	Deputy Director Division of Highways, Regional Engineer, Department of Transportation
Resident Construction Supervisor	Authorized representative of the LA in immediate charge of the engineering details of the PROJECT
Contractor	Company or Companies to which the construction contract was awarded

Section Description

Name Material Inspection '13 Route _____ Length _____ miles Structure No. _____

Termini _____

Description

Material Inspection 2013 - various projects

Agreement Provisions

The Engineer Agrees,

1. To perform or be responsible for the performance of the following engineering services for the LA in connection with the proposed improvement herein before described, and checked below:
 - a. Make such detailed surveys as are necessary for the preparation of detailed roadway plans.
 - b. Make stream and flood plain hydraulic surveys and gather high water data and flood histories for the preparation of detailed bridge plans.
 - c. Make or cause to be made such soil surveys or subsurface investigations including borings and soil profiles and analyses thereof as may be required to furnish sufficient data for the design of the proposed improvement. Such investigations are to be made in accordance with the current requirements of the DEPARTMENT.
 - d. Make or cause to be made such traffic studies and counts and special intersection studies as may be required to furnish sufficient data for the design of the proposed improvement.

- e. Prepare Army Corps of Engineers Permit, Division of Water Resources Permit, Bridge waterway sketch and/or Channel Change sketch, Utility plan and locations and Railroad Crossing work agreements.
- f. Prepare Preliminary Bridge Design and Hydraulic Report, (including economic analysis of bridge or culvert types) and high water effects on roadway overflows and bridge approaches.

NOTE Four copies to be submitted to the Regional Engineer

- g. Make complete general and detailed plans, special provisions, proposals and estimates of cost and furnish the LA with five (5) copies of the plans, special provisions, proposals and estimates. Additional copies of any or all documents, if required shall be furnished to the LA by the ENGINEER at his actual cost for reproduction.
- h. Furnish the LA with survey and drafts in quadruplicate of all necessary right-of-way dedications, construction easements and borrow pit and channel change agreements including prints of the corresponding plats and staking as required.
- i. Assist the LA in the receipt and evaluation of proposals and the awarding of the construction contract.
- j. Furnish or cause to be furnished: **Services as included and/or defined in the attached Scope of Services.**
 - (1) Proportioning and testing of concrete mixtures in accordance with the "Manual of Instructions for Concrete Proportioning and Testing" issued by the Bureau of Materials and Physical Research, of the DEPARTMENT and promptly submit reports on forms prepared by said Bureau.
 - (2) Proportioning and testing of bituminous mixtures (including extracting test) in accordance with the "Manual of Instructions for Bituminous Proportioning and Testing" issued by the Bureau of Materials and Physical Research, of the DEPARTMENT, and promptly submit reports on forms prepared by said Bureau.
 - (3) All compaction tests as required by the specifications and report promptly the same on forms prepared by the Bureau of Materials and Physical Research.
 - (4) Quality and sieve analyses on local aggregates to see that they comply with the specifications contained in the contract.
 - (5) Inspection of all materials when inspection is not provided at the sources by the Bureau of Materials and Physical Research, of the DEPARTMENT and submit inspection reports to the LA and the DEPARTMENT in accordance with the policies of the said DEPARTMENT.
- k. Furnish or cause to be furnished
 - (1) A resident construction supervisor, inspectors, and other technical personnel to perform the following work: (The number of such inspectors and other technical personnel required shall be subject to the approval of the LA.)
 - a. Continuous observation of the work and the contractor's operations for compliance with the plans and specifications as construction proceeds, but the ENGINEER does not guarantee the performance of the contract by the contractor.
 - b. Establishment and setting of lines and grades.
 - c. Maintain a daily record of the contractor's activities throughout construction including sufficient information to permit verification of the nature and cost of changes in plans and authorized extra work.
 - d. Supervision of inspectors, proportioning engineers and other technical personnel and the taking and submitting of material samples.
 - e. Revision of contract drawings to reflect as built conditions.
 - f. Preparation and submission to the LA in the required form and number of copies, all partial and final payment estimates, change orders, records and reports required by the LA and the DEPARTMENT.

NOTE: When Federal funds are used for construction and the ENGINEER or the ENGINEER's assigned staff is named as resident construction supervisor, the ENGINEER is required to be prequalified with the STATE in Construction Inspection. The onsite resident construction supervisor and project inspectors shall possess valid Documentation of Contract Quantities certification.

2. That all reports, plans, ~~plans and special provisions~~ to be furnished by the ENGINEER pursuant to this agreement will be in accordance with the current standard specifications and policies of the DEPARTMENT & LA, it being understood that all such reports, ~~plans, plans and drafts~~ shall before being finally accepted, be subject to approval by the LA and the said DEPARTMENT.
3. To attend conferences at any reasonable time when requested to do so by the LA or representatives of the DEPARTMENT.
4. In the event ~~plans, surveys or construction staking are found to be in error during the construction of the PROJECT and revisions of the plans or survey or construction staking corrections are necessary, the ENGINEER agrees that he will perform such work without expense to the LA, even though final payment has been received by him. He shall give immediate attention to these changes so there will be a minimum delay to the contractor.~~
5. The basic survey notes and sketches, charts, computations and other data prepared or obtained by the ENGINEER pursuant to this agreement will be made available upon request to the LA or the DEPARTMENT without cost and without restriction or limitations as to their use.
6. To make such changes in working plans, including all necessary preliminary surveys and investigations, as may be required after the award of the construction contract and during the construction of the improvement.
7. That all plans and other documents furnished by the ENGINEER pursuant to the AGREEMENT will be endorsed by him and will show his professional seal where such is required by law.
8. To submit, upon request by the LA or the DEPARTMENT a list of the personnel and the equipment he/she proposes to use in fulfilling the requirements of this AGREEMENT.

The LA Agrees,

1. ~~To pay the Engineer as compensation for all services performed as stipulated in paragraphs 1a, 1g, 1i, 2, 3, 5 and 6 in accordance with one of the following methods indicated by a check mark:~~

- a. A sum of money equal to _____ percent of the awarded contract cost of the proposed improvement as approved by the DEPARTMENT.
- b. A sum of money equal to the percentage of the awarded contract cost for the proposed improvement as approved by the DEPARTMENT based on the following schedule:

~~Schedule for Percentages Based on Awarded Contract Cost~~

Awarded Cost _____	Percentage Fees _____	
Under \$50,000	_____	(see note)
	_____	%
	_____	%
	_____	%
	_____	%
	_____	%

~~Note: Not necessarily a percentage. Could use per diem, cost plus or lump sum.~~

2. To pay for services stipulated in paragraphs 1b, 1c, 1d, 1e, 1f, 1h, 1j and 1k of THE ENGINEER AGREES at the hourly rates stipulated below for personnel assigned to this PROJECT as payment in full to the ENGINEER for the actual time spent in providing these services the hourly rates to include profit, overhead, readiness to serve, insurance, social security and retirement deductions. **Additionally, services provided will be according to the attached Project Unit Rates.** Traveling and other out-of-pocket expenses will be reimbursed to the ENGINEER at his actual cost. Subject to the approval of the LA, the ENGINEER may sublet all or part of the services provided under paragraphs 1b, 1c, 1d, 1e, 1f, 1j and 1k of THE ENGINEER AGREES. If the ENGINEER sublets all or a part of this work, the LA will pay the cost to the ENGINEER plus a five (5) percent service charge. "Cost to ENGINEER" to be verified by furnishing the LA and the DEPARTMENT copies of invoices from the party doing the work. The classifications of the employees used in the work should be consistent with the employee classifications for the services performed. If the personnel of the firm including the Principal Engineer perform routine services that should normally be performed by lesser-salaried personnel, the wage rate billed for such services shall be commensurate with the work performed.

**Grade Classification
of Employee**

Hourly Rate

Project Manager	\$115
Professional Engineer	\$175
Secretary	\$50
Engineering Technician	\$84
_____	_____
_____	_____
_____	_____
_____	_____

The hourly rates itemized above shall be effective the date the parties, hereunto entering this AGREEMENT, have affixed their hands and seals and shall remain in effect until 11/20/2013. ~~In event the services of the ENGINEER extend beyond _____, the hourly rates will be adjusted yearly by addendum to this AGREEMENT to compensate for increases or decreases in the salary structure of the ENGINEER that are in effect at that time.~~

The Total Not-to Exceed Contract Amount shall be \$87,685.00 as described in ECS Proposal No. 10911-CP.

3. That payments due the ENGINEER for services rendered pursuant to this AGREEMENT will be made as soon as practicable after the services have been performed, ~~in accordance with the following schedule:~~
- a. ~~Upon completion of detailed plans, special provisions, proposals and estimate of cost being the work required by paragraphs 1a through 1g under THE ENGINEER AGREES to the satisfaction of the LA and their approval by the DEPARTMENT, 90 percent of the total fee based on the above fee schedule and the approved estimate of cost.~~
 - b. ~~Upon award of the contract for the improvement by the LA and its approval by the DEPARTMENT, 100 percent of the total fee (excluding any fees paragraphs 1j and 1k of the ENGINEER AGREES), based on the above fee schedule and the awarded contract cost, less any previous payment.~~
 - c. ~~Upon completion of the construction of the improvement, 90 percent of the fee due for services stipulated in paragraphs 1j and 1k.~~
 - d. ~~Upon completion of all final reports required by the LA and the DEPARTMENT and acceptance of the improvement by the DEPARTMENT, 100 percent of the total fees due under this AGREEMENT, less any amounts previously paid.~~

~~By mutual agreement, partial payments, not to exceed 90 percent of the amount earned, may be made from time to time as the work progresses.~~

4. That should the improvements be abandoned at any time after the ENGINEER has performed any part of the services provided for in paragraphs 1a and 1g, and prior to the completion of such services the LA shall reimburse the ENGINEER for his actual costs plus _____ percent incurred up to the time he is notified in writing of such abandonment "actual cost" being defined as material costs plus actual payrolls, insurance, social security and retirement deductions. Traveling and other out-of-pocket expenses will be reimbursed to the ENGINEER at his actual cost.
5. That should the LA require changes in any of the detailed plans, specifications or estimates (except for those required pursuant to paragraph 4 of THE ENGINEER AGREES) ~~after they have been approved by the DEPARTMENT~~, the LA will pay the ENGINEER for such changes on the basis of actual cost plus _____ percent to cover profit, overhead and readiness to serve - "actual cost" being defined as in paragraph 4 above. It is understood that "changes" as used in this paragraph shall in no way relieve the ENGINEER of his responsibility to prepare a complete and adequate set of plans.
6. That should the LA extend completion of the improvement beyond the time limit given in the contract, the LA will pay the ENGINEER, in addition to the fees provided herein, his actual cost incurred beyond such time limit - "actual cost" being defined as in paragraph 4 above.
7. ~~To submit approved forms BC-775 and BC-776 with this AGREEMENT when federal funds are used for construction.~~

It is Mutually Agreed,

1. That any difference between the ENGINEER and the LA concerning the interpretation of the provisions of this AGREEMENT shall be referred to a committee of disinterested parties consisting of one member appointed by the ENGINEER one member appointed by the LA and a third member appointed by the two other members for disposition and that the committee's decision shall be final.
2. This AGREEMENT may be terminated by the LA upon giving notice in writing to the ENGINEER at his last known post office address. Upon such termination, the ENGINEER shall cause to be delivered to the LA all drawings, specifications, partial and completed estimates and data if any from traffic studies and soil survey and subsurface investigations with the understanding that all such material becomes the property of the LA. The ENGINEER shall be paid for any services completed and any services partially completed in accordance with Section 4 of THE LA AGREES.
3. That if the contract for construction has not been awarded one year after the acceptance of the plans by the LA and their approval by the DEPARTMENT, the LA will pay the ENGINEER the balance of the engineering fee due to make 100 percent of the total fees due under the AGREEMENT, based on the estimate of cost as prepared by the ENGINEER and approved by the LA and the DEPARTMENT.
4. That the ENGINEER warrants that he/she has not employed or retained any company or person, other than a bona fide employee working solely for the ENGINEER, to solicit or secure this contract and that he/she has not paid or agreed to pay any company or person, other than a bona fide employee working solely for the ENGINEER, any fee, commission, percentage, brokerage fee, gifts or any other consideration contingent upon or resulting from the award or making of this contract. For breach or violation of this warranty the LA shall have the right to annul this contract without liability.

IN WITNESS WHEREOF, the parties have caused this AGREEMENT to be executed in **triplicate** counterparts, each of which shall be considered as an original by their duly authorized offices.

Executed by the LA:

County of Lake _____ of the
(Municipality/Township/County)

ATTEST:

State of Illinois, acting by and through its

By _____
Lake County Clerk

County Board _____
By _____

(Seal)

Title: Chairman of the County Board

RECOMMENDED FOR EXECUTION

Paula J. Trigg, P.E.
Director of Transportation, County Engineer
Lake County

Executed by the ENGINEER:

ECS Midwest, LLC

1575 Barclay Blvd.

Buffalo Grove, IL 60089

ATTEST:

By  _____

Title:  _____
Title: RESIDENT

Note: Three (3) Original Executed Contracts – (2) Lake County; (1) Consultant



ECS MIDWEST, LLC

GEOTECHNICAL • CONSTRUCTION MATERIALS • ENVIRONMENTAL • FACILITIES

Estimated Cost Proposal for
Quality Assurance Services
and Laboratory Testing Services
2013 Construction Season
Lake County, Illinois





January 21, 2013

Mr. Matt Beckley
Lake County Department of Transportation
600 W. Winchester
Libertyville, Illinois 60048

ECS Proposal No. 10911-CP

Reference: Unit Price and Estimated Cost Proposal for Quality Assurance Testing and Laboratory Testing during the 2013 Construction Season, Lake County, Illinois

Dear Mr. Beckley,

As requested, ECS MIDWEST, LLC (ECS) is pleased to present the following estimated cost proposal for providing Quality Assurance services in the field and related laboratory testing on various construction projects during the 2013 Construction Season. The services offered via this proposal are intended to provide Construction Materials Observation and Testing Services. ***ECS provided similar services the 2011 and 2012 Construction Season and are familiar with the Lake County Department of Transportation quality requirements to provide positive outcomes in the 2013 Construction Season.***

PROJECT OVERVIEW

We understand the work includes performing laboratory testing on hot mix and aggregate samples, obtained during hot mix production, for compliance with project and mix design specifications. Laboratory tests include aggregate gradation, hot mix extraction by ignition and reflux method, bulk and maximum specific gravity of hot mix and density of pavement cores.

In addition, we may occasionally monitor concrete placement and soils testing on various project sites, performing Quality Assurance testing of the concrete and the associated compressive strength testing in our laboratory.

UNIT RATE SCHEDULE

An estimated cost has been included on Appendix III for your budgeting purposes. We understand the described Hot Mix services may be performed approximately once a week during the construction season (April to November). The described Portland Cement Concrete testing would be performed approximately eight to nine times a month during the season. The described Soils Testing would be performed for approximately 20 site visits through the duration of the construction season. It is our belief that all required services have been included in our unit price list and accounted for in our estimated cost. Should supplemental services be deemed necessary at a later date, they would be invoiced at the rate noted on the fee schedule in effect at that time, unless otherwise agreed upon in advance. All unit prices listed herein shall remain as stated throughout the project.

The services described herewith would be rendered portal-to-portal from our office in Buffalo Grove, Illinois. Our unit rates are based on a normal 8-hour workday, Monday through Friday, between normal business hours of 7:00 a.m. to 4:30 p.m. **Overtime beyond 8 hours/day, outside normal hours and on Saturdays will be invoiced at a rate of only 1.4 times the normal hourly rate indicated above.** We have not included in our estimate time for working on weekends or holidays. Since it is difficult for us to estimate the amount of weekend work on a project of this duration, we would consider work on weekends or holidays an extra to the contract.

All site visits for construction material testing will be subject to a 4 hour minimum and above noted travel related charges will apply. ECS technicians are represented by IUOE Local 150. As such, for time on-site greater than 4 hours, an 8 hour minimum and travel related charges will apply. Scheduling should occur prior to 4:00 p.m. on the day before services are required.

TOTAL ESTIMATED COST

This total estimated cost proposal has been prepared for your budgeting purposes and is the product of careful consideration of all information available to us during preparation of this proposal. We have had the opportunity to discuss the project with you. As such, we have formulated a scope of service and cost estimate based on our review of the information provided, our experience with the project area, and our expertise gathered while providing services on similar projects throughout the region.

Any and all deviations from the assumed quantities and timeframes detailed in the attached estimate are not included and will be considered as an addition to our proposed scope of service. Site visits for the specific task of retesting failed tests have not been included in the estimated cost. Actual costs may be greater or less than the estimate based upon actual quantities that will be calculated using the information provided to ECS and the enclosed schedule of unit rates. The total estimated cost for this project is outlined in Appendix III.

BILLING AND CONTRACT CONDITIONS

Invoices will be issued on a monthly basis and will provide a week by week breakdown of billing units, unless modified by request of the client. Upon request, ECS will provide a separate invoice for services provided outside of the proposed scope of work. Invoices are normally processed on or around the 10th of each month and represent costs incurred during the previous month. These invoices will also display a monthly cumulative summary of project costs to date. This monthly summary will serve as a means of monitoring expenses as they relate to job progress. We request that payment be rendered within 30 days of receipt of the invoice. ECS reserves the right to assess a finance charge of 1.5% per month on the outstanding balance over 30 days. ECS also reserves the right to withhold final certifications until outstanding balances have been paid in full.

ECS QUALIFICATIONS

ECS Midwest, LLC is part of the ECS Group of companies that was founded in 1988. The ECS Group was ranked by ENR as the 116th largest engineering firm in the United States for 2009. There are 6 primary operating companies in the ECS Group with 34 engineering offices in 11 states, as well as various other independent affiliates.

ECS Midwest, LLC specializes in the related fields of geotechnical, environmental, and construction materials engineering. Our staff includes registered professional engineers and geologists, certified laboratory technicians and construction inspectors, field engineers, and support personnel.

We have earned a reputation for being highly responsive and a problem solver. A brief description of our groups follows:

- Our **Geotechnical Group** has performed subsurface explorations on numerous projects. It has provided extensive value engineering services for foundation design through use of the pressuremeter. In addition, we have implemented earth retention system monitoring programs on many deep excavation projects and consulted on ground-water control and designed wall and under slab drainage systems.
- Our **Construction Materials Group** has provided testing and inspection services on thousands of projects, with scopes of work reflecting our ability to follow projects from earthwork phases through roofing construction, including such complex activities as adjacent facility monitoring.
- Our **Environmental Group** acts both independently in performing assessments and other environmental activities, and in conjunction with our other departments in evaluating emerging environmental situations on sites under construction.

To assure top quality field personnel, we have developed our own in-house training and certification programs, and we require certifications from outside agencies such as the American Concrete Institute (ACI), the American Welding Society (AWS), and the Roofing Industry Educational Institute (RIEI). Our testing laboratories are accredited by IDOT, AASHTO Materials Reference Laboratories (AMRL), ASTM, WACEL, and the National Institute of Standards and Technology (NIST).

Our reporting systems are fully automated using proprietary database software. We produce and process final field and laboratory reports with the highest efficiency and speed. ECS operates in a very competitive market. As such, we have come to place great emphasis on providing high-quality services to meet specific client needs. The expectations of our clients are the basis for our high standards, and we maintain those standards throughout each project we serve.

KEY STAFF

On projects such as the 2013 Lake County Transportation projects, our organization would assign experienced and certified Engineering Staff and Field/Lab Technicians to the project. This Engineering Technician performs as-needed testing and monitoring functions, as well as direction of an assistant technician when activities warrant this presence. The engineering technician is in turn under the supervision of a Project Engineer, who is responsible for monitoring job progress, ECS performance, and project status and budget. The Project Engineer is responsible to a Principal Engineer, who regularly monitors progress and provides additional technical expertise for unusual or difficult circumstances. We anticipate that the Project Engineer will review the progress of the project daily, while the Principal Engineer will provide technical direction where required. A certification listing of our current staff is included below.

Name	PCC Level I	PCC Level II	PCC Level III	HMA Level I	HMA Level II	HMA Level III	3 Day Agg.	Const. Doc.	Std. Earth Density, S-33
Ian Wade, P.E.	X	X	X	X	X	X	X	X	X
Richard Scruton P.E.	X	X	pending	X	X	pending	X	X	X
David Allemana	X	X		X	X		X	X	X
Don Richards	X	X		X	X	X	X		
Joann Liu	X	X	X	X	X	X	X		X
Steve Martin	X	X					X		X
Perrie Radomski	X	X		X	X		X		X
Willie Gibbs	X	X		X			X		X
Ashok Gandhi	X	X		X	X		X		X
Paresh Kadakiya	X	X		X	X		X		X
Paul Lyman	X	X					X		X
Jamal Salim	X	X		X			X		X
Satish Sura	X	X		X			X		X
Syed Haneef	X	X		X	X		X		X
Jon Wharton	X	X		X			X		X
Rey Velazquez	X	X		X			X		X

The following individuals are proposed for assignment to this project. They are listed in their order of responsibility:

Principal Engineer in Charge

Ian Wade, P.E.

Senior Project Manager

Nelson Brown, P.E.

Lead Materials Technician

To Be Assigned on an as needed basis from the previous listing.

If any of these proposed team members are unavailable at the time this project begins construction, we would offer candidates of equal or greater qualification as alternatives.

ELECTRONIC PAPERLESS REPORTING

ECS utilizes advanced communications and information technology to reduce the time from actual field reporting to the distribution of a report approved by the Project Manager and Principal Engineer. During each day of construction activities, ECS field technicians electronically enter test data into ETHEL (ECS Technician Handheld Electronic Logbook) while in the field. The test data is then transmitted to the branch office via wireless technology. The field report is then entered into our database and released into FRED (Field Report Electronic Distribution).

Once in FRED, the electronic copy of the field report is reviewed first by the Project Manager and then the Principal Engineer. Upon final review, electronic signatures and Professional Engineer's seal are applied to the report. The report is then printed, mailed, faxed or emailed to those on the distribution list and an electronic copy is archived on our servers for rapid retrieval. This system makes it possible to provide all project reports on a CD-ROM at the end of the project. The implementation of FRED has significantly improved efficiency in the review and approval process of reports through the office, while allowing managers to efficiently monitor progress of the project.

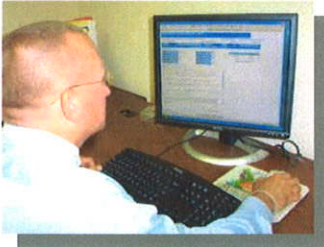
ECS daily field reports and laboratory reports are generally submitted and on your desk in electronic format within 24 to 36 hours of the performance date. If deficiencies or non-compliances are noted, a running punch list of deficiency items is maintained and the list is included with the reports so that problems may be resolved prior to the performance of additional work. Copies of reports will be forwarded to each party designated by the client, at no extra charge, as part of our service.



ECS Field Technician performs tests on materials at the job site, recording the test results directly into a Personal Digital Assistant (PDA).



Test results are transmitted to the office for review by the ECS Project Management team by way of cellular phone before leaving the job site.



Test reports are reviewed and transmitted to the client within 24 to 36 hours after tests have been completed in the field.

“Setting the Standard for Service”



SUMMARY AND ACCEPTANCE

Attached to this letter, and an integral part of our proposal, are our "Terms and Conditions of Service" (Appendix IV). These conditions represent the current recommendations of the Association of Soil and Foundation Engineers, the Geo-professional Business Association, and the Geotechnical Division of the American Society of Civil Engineers.

Should these services be authorized without receiving a written copy of this contract, the terms and conditions of this contract shall, nevertheless be in effect, even in the absence of a written acceptance by you.

Our insurance carrier requires that we receive written authorization prior to initiation of work, and a signed contract prior to the release of any work product. This letter is the agreement for our services. Your acceptance of this proposal may be indicated by signing and returning the enclosed copy to us. We are pleased to have this opportunity to offer our services and look forward to working with you on the project.

Respectfully,

ECS Midwest, LLC



Jay Naik
Project Manager



Nelson Brown, P.E.
Manager, Construction Services Department

Attachments:

- Appendix I - Scope of Services
- Appendix II - Project Unit Rates
- Appendix III - Estimated Costs
- Appendix IV - Proposal Acceptance and Terms and Conditions

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APPENDIX I - SCOPE OF SERVICES

A. Cast-in-Place Concrete:

1. Verify compliance with the provisions of ACI 318, 301, 214, 304, 305 and 306, local building codes, generally accepted construction practices, and specific project and Illinois Department of Transportation requirements.
2. Perform Quality Assurance duties at the production plant, including sampling and testing of aggregate materials, reviewing supplier and batch data and comparing results with producers Quality Control.
3. Observe placement of concrete on site and document procedures with regard to forming, vibration, and curing.
4. Sample concrete at the frequency stated in the project specifications and perform the following tests and functions:
 - a. Confirm mix design
 - b. Slump
 - c. Air Content
 - d. Temperature
 - e. Batch-to-placement time
 - f. Cast test cylinders

Sampling, testing, and curing of specimens in the field shall be performed in accordance with applicable IDOT and ASTM guidelines and project requirements. Additional tests shall be performed as needed in the event deficiencies are encountered. Compliance with extreme weather procedures will also be documented.

5. Cure and test concrete cylinders in the laboratory as directed by the project specifications and in accordance with ASTM C-31 and C-39.
6. Provide documentation of events in the field and notify the appropriate persons upon recognition of deficiencies.
7. Perform split testing with Quality Control personnel, confirming test results are in accordance with IDOT specification limits.

B. Hot Mix Asphalt:

1. Perform Quality Assurance duties at the production plant, including sampling and testing of aggregate materials, reviewing supplier and batch data and comparing results with producers Quality Control.
2. Observe placement methods, rolling operations and temperature of paving mixture at time of placement.
3. Perform appropriate measurements and tests in the field to verify adequate asphalt thickness and density.
4. Perform appropriate laboratory tests in accordance with IDOT and project specifications.
5. Provide documentation of events in the field and notify the appropriate persons upon recognition of deficiencies.
6. Perform split testing with Quality Control personnel, confirming test results are in accordance with IDOT specification limits.

C. Earthwork/Foundations:

1. Perform appropriate laboratory testing on materials proposed for use as fill, backfill, and paving subgrade in accordance with project specifications. Testing may include:
 - a. Proctor Moisture Density Relationships ASTM D-698 or D-1557.
2. Periodically observe excavation operations to document removal of unsuitable materials including debris, frozen soil, problem clays or stones with a maximum dimension greater than 3 inches.
3. Observe conditions of bottom of excavations, including proofrolling and other testing of subgrades; note seepage of water, and suggest and observe corrective measures at problem areas.
4. Observe placement of fill and backfill (including backfill in utility trenches and against foundation walls) to test compliance with project requirements. Perform in-place density tests as required by project specifications, and test each lift for compaction.
5. Where deficiencies are noted during fill or backfill placement, suggest and observe remedial actions, including reworking and recompacting of materials.
7. Provide documentation of events in the field and notify the appropriate persons upon recognition of deficiencies.

APPENDIX II - PROJECT UNIT RATES

FIELD SERVICES

	<u>UNIT RATE</u>
1. Engineering Technician	\$ 84.00/hour
2. Sample Pickup, includes mileage (from LCDOT Libertyville lab)	\$ 100.00/pickup
3. Trip Charge (mileage)	\$ 30.00/trip

ENGINEERING/ADMINISTRATIVE SERVICES

1. Project Manager	\$ 115.00/hour
2. Professional Engineer	\$ 175.00/hour
3. Secretary	\$ 50.00/hour

LABORATORY and RELATED SERVICES

1. Compressive strength testing, curing & disposal of concrete cylinders	\$ 15.00/each
2. Standard Proctor Moisture Density Relationships ASTM D-667	\$ 175.00/each
3. Nuclear Gauge Rental	\$ 25.00/day
4. Washed Aggregate Gradation	\$ 75.00/each
5. Hot Mix Extraction, Ignition or Reflux (includes Asphalt Content and Washed Gradation)	\$ 175.00/each
6. Maximum Specific Gravity of Hot Mix (Big "D"), 2 tests	\$ 75.00/each
7. Bulk Specific Gravity of Hot Mix by Gyratory, (Little "d"), 2 tests	\$ 125.00/each
8. Bulk Specific Gravity of Cores, per test	\$ 40.00/each
9. Cylinder Pickup (includes mileage)	\$ 100.00/each

The services described above would be rendered portal-to-portal from our office in Buffalo Grove, Illinois with a trip charge (mileage) of \$30 and a maximum of 1½ hours of travel roundtrip charged as travel-related expenses to normalize our travel to the project site. Our unit rates are based on a normal 8-hour workday, Monday through Friday, between normal business hours of 7:00 a.m. to 4:30 p.m. Overtime beyond 8 hours/day, outside normal hours and on Saturdays will be invoiced at a rate of 1.4 times the normal hourly rate indicated above. We have not included in our estimate time for working on weekends or holidays. Since it is difficult for us to estimate the amount of weekend work on a project of this duration, we would consider work on weekends or holidays an extra to the contract. A minimum ¼ hour for Project Engineer and Project Manager and ½ hour for Secretarial services may be applied for each day an ECS technician is on-site.

All site visits will be subject to a 4 hour minimum and above noted travel related charges will apply. ECS technicians are represented by IUOE Local 150. As such, for time on-site greater than 4 hours, an 8 hour minimum and travel related charges will apply. Scheduling should occur prior to 4:00 p.m. on the day before services are required. Cancellation of services within two hours prior to the scheduled arrival time will be subject to a 2 hour minimum and any travel related charges incurred.

APPENDIX III – ESTIMATED COSTS

**2013 Transportation Projects
Lake County, IL**

Hot Mix Asphalt Testing	Hours/Units	Rate	Cost
8 Month Season x 4 weeks/month x 1 samples/week • 40 samples			
Aggregate Gradations	40	\$75.00	\$3,000.00
Hot Mix Extractions	40	\$175.00	\$7,000.00
Bulk Specific Gravity	40	\$125.00	\$5,000.00
Maximum Specific Gravity	40	\$75.00	\$3,000.00
Core Density	50	\$40.00	\$2,000.00
Sample Pickup	20	\$100.00	\$2,000.00
		Sub Total:	\$22,000.00

Concrete Testing	Hours/Units	Rate	Cost
10 Month Season x 9 site visits/month • 90 site visits			
Aggregate Gradations	20	\$75.00	\$1,500.00
Field Technician	360	\$84.00	\$30,240.00
Compressive Strength Cylinders	180	\$15.00	\$2,700.00
Project Engineer	40	\$115.00	\$4,600.00
Principal Engineer	20	\$175.00	\$3,500.00
Cylinder Pickup	30	\$100.00	\$3,000.00
Trip Charge	90	\$30.00	\$2,700.00
		Sub Total:	\$48,240.00

Soils Testing	Hours/Units	Rate	Cost
10 Month Season x 2 site visits/month • 20 site visits			
Field Technician	160	\$84.00	\$13,440.00
Project Engineer	7	\$115.00	\$805.00
Principal Engineer	2	\$175.00	\$350.00
Nuclear Gauge Rental	20	\$25.00	\$500.00
Standard Proctor (ASTM D 689)	10	\$175.00	\$1,750.00
Trip Charge	20	\$30.00	\$600.00
		Sub Total:	\$17,445.00

The estimated cost for services as noted is **\$87,685.00**. It is important to note that this figure was determined through careful consideration of the scope of services required, the rate of progress expected at this time. Because we are unable to control the actual rate of progress, we would only consider this estimate a not-to-exceed amount contingent upon strict adherence to the schedule duration's and scope of services used as a basis in this proposal.

APPENDIX IV - PROPOSAL ACCEPTANCE

ECS MIDWEST, LLC

Proposal No.: 10911-CP
Scope of Work: Construction Materials Observation and Testing Services
Location: Various 2013 Transportation Project, Lake County, Illinois

Client Signature: _____ Date: _____

Please complete and return this page to ECS to indicate acceptance of this proposal and to initiate work on the above-referenced project. The Client's signature above also indicates that he/she has read or has had the opportunity to read the accompanying Terms and Conditions of Service and agrees to be bound by such Terms and Conditions of Service.

BILLING INFORMATION
(Please Print or Type)

Name of Client: _____

Name of Contact Person: _____

Telephone No. of Contact Person: _____

E-mail Address of Contact Person: _____

Party Responsible for Payment: _____

Company Name: _____

Person/Title _____

Department: _____

Billing Address: _____

Telephone Number: _____

Fax Number: _____

E-mail Address: _____

Client Project/Account Number _____

Special Conditions for Invoice _____

Submittal and Approval _____

ECS MIDWEST, LLC TERMS AND CONDITIONS OF SERVICE

These Terms and Conditions of Service, including any supplements that may be agreed to, along with the accompanying Scope of Services and Professional Fees constitute the entire Agreement ["AGREEMENT"] under which Services are to be provided by ECS MIDWEST, LLC ["ECS"] (including its employees, officers, successors and assigns) for Client ["CLIENT"] (including its employees, officers, successors and assigns).

1.0 INDEPENDENT CONSULTANT STATUS

- 1.1 Except as may be otherwise noted herein, ECS shall serve as an independent professional consultant to CLIENT and shall have control over, and responsibility for, the means and methods for providing the Services under this AGREEMENT, including the retention of Subcontractors and Subconsultants. Unless expressly stated in ECS' Scope of Services, ECS shall not serve as CLIENT'S agent or representative.

2.0 SCOPE OF SERVICES

- 2.1 It is understood that the Scope of Services, Professional Fees, and time schedule defined in the Scope of Services are based on information provided by CLIENT and/or CLIENT'S contractors and consultants. CLIENT acknowledges that if this information is not current, is incomplete or inaccurate, or if conditions are discovered that could not be foreseen by a reasonable person, the Scope of Services may change, even while the Services are in progress.

3.0 STANDARD OF CARE

- 3.1 ECS shall strive to perform its professional Services in a manner consistent with that level of skill and care ordinarily exercised by competent members of the same profession providing similar Services in the same region, under similar conditions during the same time period. No other representation, expressed or implied, and no warranty or guarantee is included or intended in this AGREEMENT, or in any ECS report, opinion, plan or other Document of Service, in connection with ECS' Services.
- 3.2 CLIENT understands and agrees that ECS' professional judgment must rely on the facts learned during performance of the Scope of Services. CLIENT acknowledges that such data collection is limited to the immediate area that is sampled, tested and/or observed. Consequently, CLIENT agrees that it shall not bring a claim, based upon facts subsequently learned, regarding conditions between sampling/testing points, in areas not evaluated by ECS, or which were not part of the immediate area(s) explicitly evaluated by ECS.
- 3.3 ECS' professional Services shall be provided in a manner consistent with sound engineering and professional practices. If a situation arises that causes ECS to believe compliance with CLIENT'S wishes could result in ECS violating applicable Laws or Regulations, or will expose ECS to claims or other charges, ECS shall so advise CLIENT. If CLIENT'S actions or inaction result in a violation of applicable Laws or Regulations, ECS shall have the right to terminate its Services in accordance with the TERMINATION provisions of this AGREEMENT.
- 3.4 If CLIENT decides to disregard ECS' recommendations with respect to complying with applicable Laws or Regulations, ECS shall determine if ECS is required to notify the appropriate public officials. CLIENT agrees that such determinations are ECS' sole right to make. CLIENT also agrees that ECS shall not bear liability for failing to report conditions that are CLIENT'S responsibility to report.

4.0 CLIENT DISCLOSURES

- 4.1 CLIENT shall furnish and/or shall direct CLIENT'S consultant(s) or agent(s) to furnish ECS information identifying the type and location of utility lines and other man-made objects known, suspected, or assumed beneath the Site's surface, where the Scope of Services requires ECS to penetrate the Site surface.
- 4.2 CLIENT shall notify ECS of any known, assumed, or suspected regulated, contaminated, or Hazardous Materials that may exist at the Site prior to ECS mobilizing to the Site. Such Hazardous Materials shall include but not be limited to any substance which poses or may pose a present or potential hazard to human health or the environment whether contained in a product, material, by-product, waste, or sample, and whether it exists in a solid, liquid, semi-solid or gaseous form ["Hazardous Materials"].
- 4.3 If any Hazardous Materials are discovered, or are reasonably suspected by ECS after its Services are initiated, a Changed Condition shall exist.

5.0 INFORMATION PROVIDED BY OTHERS

- 5.1 CLIENT waives any claim of liability against ECS regarding any claim for injury or loss allegedly arising from errors, omissions, or inaccuracies in documents and other information in any form provided to ECS, including such information that becomes incorporated into ECS Documents of Service.

6.0 CONCEALED RISKS

- 6.1 CLIENT acknowledges that special risks are associated with the identification of concealed conditions [i.e., subsurface conditions, conditions behind a wall, etc., that are hidden from view, are not readily apparent, or cannot be accessed for sampling/testing].
- 6.2 Conditions that ECS infers to exist between sampling/testing points may differ significantly from the conditions that exist at the sampling/testing points. Since some conditions can change substantially over time, the CLIENT recognizes that, because of natural occurrences or human intervention at or near the Site, actual conditions discovered through sampling/testing may be subject to rapid or gradual change.
- 6.3 ECS will make reasonable efforts to anticipate and identify potential concealed conditions for exploration, sampling or testing. However, CLIENT understands that such risks cannot be eliminated and agrees that the Scope of Services is that which

CLIENT agrees suits CLIENT'S own risk tolerances. CLIENT may request ECS to evaluate the risks and provide a higher level of exploration to reduce such risks, if desired or appropriate.

7.0 RIGHT OF ENTRY/DAMAGE RESULTING FROM SERVICES

- 7.1 CLIENT warrants that it possesses the authority to provide right of entry permission for the performance of ECS' Services. CLIENT hereby grants ECS and its subcontractors and/or agents, the right to enter from time to time onto the property owned by CLIENT and/or other(s) in order for ECS to perform the Scope of Services.
- 7.2 Except where ECS' Scope of Services explicitly includes obtaining permits, licenses, and/or utility clearances for the performance of ECS' Services, CLIENT warrants that it possesses all necessary permits, licenses and/or utility clearances for the Services to be provided by ECS.
- 7.3 ECS will take reasonable precautions to limit damage to the Site and improvements during the performance of ECS' Services. CLIENT understands that use of exploration, sampling, or testing equipment may cause some damage, the correction and restoration of which is not part of this AGREEMENT, unless explicitly stated in ECS' Scope of Services, and reflected in the Professional Fees.
- 7.4 CLIENT agrees that it will not bring any claims for liability or for injury or loss allegedly arising from procedures associated with exploration, sampling or testing activities, or discovery of Hazardous Materials, or suspected Hazardous Materials, or ECS' findings, conclusions, opinions, recommendations, plans, and/or specifications related to discovery of contamination.

8.0 UNDERGROUND UTILITIES

- 8.1 In addition to CLIENT-furnished information regarding underground utilities, ECS shall take reasonable and locally customary precautions, possibly including contacting local public and/or private utility locating services, and/or conducting research of publicly available information, to identify underground utilities, as deemed appropriate in ECS' professional opinion. The extent of such precautions shall be at ECS' sole discretion.
- 8.2 CLIENT recognizes that despite due care, ECS may be unable to identify the locations of all subsurface utility lines and man-made features, and that information obtained by ECS and/or ECS' subcontractor(s) or provided to ECS from any entity may contain errors or be incomplete.
- 8.3 CLIENT agrees that ECS shall not be liable for damage or injury, consequential economic damages, and/or penalties resulting from damage to subterranean structures (pipes, tanks, cables, or other utilities, etc.) which are not called to ECS' attention in writing and correctly shown on the diagram(s) furnished by CLIENT or CLIENT'S consultants, or for underground features not marked, or improperly located by governmental or quasi-governmental locators, utility owners, or private utility locating services.

9.0 SAMPLES

- 9.1 Soil, rock, water, building materials and/or other samples and sampling by-products obtained from the Site are the property of CLIENT. ECS will store samples not consumed in laboratory testing for up to sixty (60) calendar days after the issuance of any document containing data obtained from those samples, unless other arrangements are mutually agreed upon in writing. Samples consumed by laboratory testing procedures will not be stored as outlined above.
- 9.2 Unless CLIENT directs otherwise, CLIENT authorizes ECS to dispose of CLIENT'S non-hazardous samples and sampling or testing process byproducts in accordance with applicable Laws.

10.0 ENVIRONMENTAL RISKS

- 10.1 All substances on, in, or under CLIENT'S Site, or obtained from CLIENT'S Site as samples or as byproducts of the sampling process, are and will remain CLIENT'S property.
- 10.2 When Hazardous Materials are known, assumed, or suspected to exist at the Site, ECS shall take appropriate precautions deemed prudent in ECS' sole and professional opinion to comply with applicable Laws and Regulations, and to reduce the risks to ECS' employees, public health, safety, and welfare, and the environment. CLIENT agrees to compensate ECS for such precautions.
- 10.3 When Hazardous Materials are known, assumed, or suspected to exist at the Site, ECS will handle such materials as Hazardous Materials. ECS or ECS' subcontractors will containerize and label such Materials in accordance with applicable Law, and will leave the containers on Site. CLIENT is responsible for the retrieval and lawful removal, transport and disposal of such contaminated samples, and sampling process byproducts.
- 10.4 Unless explicitly stated in ECS' Scope of Services, ECS shall not subcontract nor arrange for the transport, disposal, or treatment of Hazardous Materials. At CLIENT'S request, ECS may assist CLIENT in identifying appropriate alternatives for transport, off-site treatment, storage, or disposal of such substances, but CLIENT, not ECS, shall make final selection of methods and firms to provide such services. CLIENT shall sign all manifests for the disposal of substances affected by Hazardous Materials contaminants and shall otherwise exercise prudence in arranging for lawful disposal.
- 10.5 In those instances where ECS is expressly retained by CLIENT to assist CLIENT in the disposal of Hazardous Materials, samples, or wastes, ECS shall do so only as CLIENT'S agent (notwithstanding any other provision of this AGREEMENT to the contrary) so that ECS shall not assume the role of, nor be considered a generator, storer, transporter, or disposer of Hazardous Materials.

10.6 Subsurface sampling may result in unavoidable cross-contamination of certain subsurface areas, as when a probe or excavation/boring device moves through a contaminated zone and links it to an aquifer, underground stream, or other hydrous body not previously contaminated, or connects an uncontaminated zone with a contaminated zone. Because sampling is an essential element of ECS' Services indicated herein, CLIENT agrees this risk cannot be eliminated. CLIENT will not hold ECS liable for such cross-contamination if ECS provides its Services in accordance with the applicable Standard of Care.

10.7 CLIENT understands that a Phase I Environmental Site Assessment (ESA) is conducted solely to permit ECS to render a professional opinion about the likelihood of the site having a Recognized Environmental Condition on, in, beneath, or near the Site at the time the Services are conducted. No matter how thorough a Phase I ESA study may be, findings derived from its conduct are highly limited and ECS cannot know or state for an absolute fact that the Site is unaffected by one or more Recognized Environmental Conditions. Given the foregoing, CLIENT'S acceptance of this AGREEMENT shall signify that CLIENT understands the limitations associated with Phase I ESAs.

11.0 OWNERSHIP OF DOCUMENTS

11.1 With the exception of the copies of the ECS Documents of Service provided to the CLIENT, all documents, technical reports, letters, photos, boring logs, field data, field notes, laboratory test data, calculations, designs, plans, specifications, reports, or similar documents and estimates of any kind furnished by ECS ["Documents of Service"] maintained in any form deemed appropriate by ECS, are and remain, the property of ECS.

11.2 Any exploration, reconnaissance, data review, observations, testing, surveys or similar Services, analyses and recommendations associated with the Services shall be provided by ECS (including subcontracted Services) for the CLIENT'S sole use. CLIENT understands and agrees that any use of the Documents of Service by anyone other than the CLIENT is not permitted.

11.3 CLIENT agrees to not use ECS' Documents of Service for any other projects, or for the Project which has changed in scope, or extensions of the Project, from the details contemplated in ECS' Documents of Service. Any reuse without ECS' written consent shall be at CLIENT'S sole risk and without liability to ECS or to ECS' subcontractor(s).

11.4 CLIENT agrees that ECS' Documents of Service may not under any circumstances be altered by any party except ECS. CLIENT warrants that ECS' Documents of Service shall be used only and exactly as submitted by ECS.

11.5 Except for daily field reports and concrete test reports sent electronically by ECS to CLIENT and CLIENT'S designees, the following shall apply to all electronic files: Files in electronic media format of text, data, graphics, or other types that are furnished by ECS are furnished only for convenience, not reliance by the receiving party. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies shall govern.

12.0 SAFETY

12.1 CLIENT agrees that ECS is responsible solely for the basic safety of ECS' employees on the Project Site. These responsibilities shall not be inferred by any party to mean that ECS has responsibility for any portion of site safety for any reason. Unless otherwise expressly agreed to in writing, ECS' Scope of Services excludes responsibility for any aspect of site safety other than for ECS' own employees, and nothing herein shall be construed to relieve CLIENT and/or its other contractors, consultants, or other parties from their responsibility for the safety of their own employees. For active construction sites, CLIENT also agrees that the General Contractor is solely responsible for Project Site safety, and that ECS personnel rely on the safety measures provided by the General Contractor.

12.2 In the event ECS expressly assumes health and safety responsibilities for toxic or other concerns specified, the acceptance of such responsibility does not and shall not be deemed an acceptance of responsibility for any other health and safety requirements, such as those relating to excavating, trenching, shoring, drilling, backfilling, blasting, or other construction activities.

13.0 CONSTRUCTION TESTING AND REMEDIATION SERVICES

13.1 CLIENT understands that construction testing and observation Services are conducted to reduce, not eliminate, the risk of problems arising during or after construction or remediation, and that provision of such Services does not create a warranty or guarantee of any type.

13.2 Monitoring and/or testing Services provided by ECS shall not in any way relieve the CLIENT'S contractor(s) from their responsibilities and obligations for the quality or completeness of construction, nor for complying with applicable Laws and codes.

13.3 The professional activities of ECS, or the presence of ECS employees and subcontractors, shall not be construed to imply ECS has any responsibility for the means, methods, techniques, sequencing of construction, or procedures of construction selected, for safety precautions and programs incidental to the Contractor's Work. Furthermore, ECS does not and shall not have or accept authority to supervise, direct, control, or stop Contractor's Work.

13.4 ECS strongly recommends that CLIENT retain ECS to provide its Services on a full time basis to lower the risk of defective or incomplete Work being installed by CLIENT'S contractor(s). If CLIENT elects to retain ECS on a part time basis for any aspect of construction monitoring and/or testing, CLIENT accepts the increased risks that a significantly lower level of construction quality may occur and that such defects may not be undetected by ECS' part time observations. Therefore CLIENT waives any and all claims against ECS related to unsatisfactory quality or performance of elements observed or tested by ECS on a part time basis.

14.0 CERTIFICATIONS

14.1 CLIENT may request, or governing jurisdictions may require, ECS to provide a "certification" regarding Services provided by ECS. Any "certification" required of ECS by the CLIENT, or jurisdiction(s) having authority over some or all aspects of the Project, shall consist of ECS' inferences and professional opinions based on

limited sampling, observations, tests, and/or analyses performed by ECS at discrete locations and times. ECS' "certification" shall consist of ECS' professional opinion of a condition's existence, but ECS does not guarantee that such condition exists, nor does it relieve other parties of responsibilities or obligations such parties have. CLIENT agrees not to make resolution of any dispute with ECS or payment of any amount due to ECS in any way contingent upon ECS signing any such "certification" documents.

15.0 BILLINGS AND PAYMENTS

15.1 Billings will be based on the unit rates, travel costs, and other reimbursable expenses stated in the Professional Fees. Any Estimate of Professional Fees stated in this AGREEMENT shall not be considered as a not-to-exceed or lump sum amount unless otherwise explicitly stated in this AGREEMENT.

15.2 Should ECS identify a Changed Condition, ECS shall notify the CLIENT of the Changed Condition(s) that in ECS' professional judgment require an amendment of the Professional Fees, time schedule, and/or Scope of Services. ECS and CLIENT shall promptly and in good faith negotiate an amendment to this AGREEMENT.

15.3 CLIENT recognizes that time is of the essence with respect of payment of ECS' invoices, and that timely payment is a material part of the consideration of this AGREEMENT. Payment shall be in U.S. funds drawn upon U.S. banks and in accordance with the rates and charges set forth in the Professional Fees. Invoices shall be due and payable upon receipt.

15.4 If CLIENT disputes all or part of an invoice, CLIENT shall provide ECS with written notice stating in detail the facts of the dispute within twenty-one (21) calendar days of the invoice date and agrees to pay the undisputed amount of such invoice promptly.

15.5 ECS reserves the right to charge CLIENT an additional charge of one-and-one-half (1.5) percent (or the maximum percentage allowed by Law, whichever is lower) of the invoiced amount per month for any payment received by ECS more than thirty (30) calendar days from the date of the invoice, excepting any portion of the invoiced amount in dispute and resolved in favor of CLIENT. Payment will first be applied to accrued interest and then to the unpaid principal amount. Payment of invoices shall not be subject to unilateral discounting or set-offs by CLIENT.

15.6 CLIENT agrees that its obligation to pay for the Services is not contingent upon CLIENT'S ability to obtain financing, zoning, approval of governmental or regulatory agencies, permits, final adjudication of a lawsuit in which ECS is not involved, upon CLIENT'S successful completion of the Project, settlement of a real estate transaction, receipt of payment from CLIENT'S client, or any other event. Retainage shall not be withheld from any payment, nor shall any deduction be made from any invoice on account of penalty, liquidated damages, or other sums incurred by CLIENT. It is agreed that all costs and legal fees including actual attorney's fees, and expenses incurred by ECS in enforcing any provision of the AGREEMENT, in perfecting or obtaining a lien, recovery under a bond, collecting any delinquent amounts due, or executing judgments, shall be reimbursed by CLIENT.

15.7 Payment of any invoice by the CLIENT shall be taken to mean that the CLIENT agrees to the provisions of the AGREEMENT and is satisfied with ECS' Services and is not aware of any defects in those Services, unless CLIENT has provided notice to ECS in accordance with the DEFECTS IN SERVICE provisions of this AGREEMENT.

16.0 DEFECTS IN SERVICE

16.1 CLIENT and CLIENT'S personnel and contractors shall promptly inform ECS of any actual or suspected defects in ECS' Services, to help ECS take those prompt, effective measures that in ECS' opinion will help reduce or eliminate the consequences of any such defect. Corrections of defects attributable to ECS' Services shall be provided at no cost to CLIENT, except in the case that the deficiency is directly attributable to CLIENT-furnished information, CLIENT shall compensate ECS for the costs of correcting such defects.

16.2 Modifications to reports, documents and plans required as a result of jurisdictional reviews or CLIENT requests shall not be considered to be defects in Services. CLIENT shall compensate ECS for Additional Services required as a result of jurisdictional review requirements.

17.0 INSURANCE

17.1 ECS represents that it and its subcontractors and subconsultants are protected by Workers Compensation insurance, and that ECS is covered by general liability, automobile and professional liability insurance policies which it deems reasonable and adequate.

17.2 ECS shall furnish certificates of insurance upon request. The CLIENT is responsible for requesting specific inclusions or limits of coverage that are not present in ECS insurance, the cost of such inclusions or coverage increases, if available, will be at the expense of the CLIENT.

18.0 LIMITATION OF LIABILITY

18.1 CLIENT AGREES TO ALLOCATE CERTAIN OF THE RISKS ASSOCIATED WITH THE PROJECT BY LIMITING ECS' TOTAL LIABILITY TO CLIENT, SUBJECT TO AVAILABLE INSURANCE PROCEEDS, ARISING FROM ECS' PROFESSIONAL ACTS, ERRORS, OR OMISSIONS AND FOR ANY AND ALL CAUSES INCLUDING NEGLIGENCE, STRICT LIABILITY, BREACH OF CONTRACT, OR BREACH OF WARRANTY, INJURIES, DAMAGES, CLAIMS, LOSSES, EXPENSES, OR CLAIM EXPENSES (INCLUDING REASONABLE ATTORNEY'S FEES) UNDER THIS AGREEMENT TO THE FULLEST EXTENT PERMITTED BY LAW, AS FOLLOWS. For projects where ECS' Fee Estimate or proposed fees are:

18.1.1 \$10,000 or less, ECS' total aggregate liability to CLIENT shall not exceed \$5,000, or the total fee for the services rendered, whichever is greater.

18.1.2 In excess of \$10,000, ECS' total aggregate liability to CLIENT shall not exceed \$50,000, or the total fee for the services rendered, whichever is greater.

18.2 CLIENT agrees that ECS shall not be responsible for bodily injury and property damage or losses arising directly or indirectly, in whole or in part, from acts or omissions by the CLIENT, its employees, agents, staff, consultants or subcontractors or by any other person or combination of persons to the extent such

injury, damage, or loss is caused by acts or omissions of CLIENT, its employees, agents, staff, consultants or subcontractors.

19.0 INDEMNIFICATION

19.1 ECS agrees, subject to the limitation of liability provisions of this AGREEMENT, to hold harmless and indemnify CLIENT from and against damages arising from ECS' negligent performance of its Services to the extent that such injury is found to be caused by ECS' negligent acts, errors or omissions, specifically excluding any damages caused by any third party or by the CLIENT.

19.2 To the fullest extent permitted by applicable Law, CLIENT agrees to indemnify, defend, and hold ECS harmless from and against any and all liability, claims, damages, demands, fines, penalties, costs and expenditures (including reasonable attorneys' fees and costs of litigation defense and/or settlement) ["Damages"] caused in whole or in part by the negligent acts, errors, or omissions of the CLIENT and CLIENT'S employees, agents, staff, contractors, subcontractors, consultants, and clients, provided such Damages are attributable to: (a) the bodily injury, personal injury, sickness, disease and/or death of any person; (b) injury to or loss of value to tangible personal property; or (c) a breach of this AGREEMENT, except to the extent such Damage is caused by the sole negligence or willful misconduct of ECS.

19.3 It is specifically understood and agreed that in no case shall ECS be required to pay an amount of Damages disproportional to ECS' culpability, or any share of any amount levied to recognize more than actual economic damages, subject to any limitations of liability and INDEMNIFICATION provisions contained in this AGREEMENT.

19.4 If CLIENT IS A HOMEOWNER, HOMEOWNERS' ASSOCIATION, CONDOMINIUM OWNER, CONDOMINIUM OWNER'S ASSOCIATION, OR SIMILAR RESIDENTIAL OWNER, ECS RECOMMENDS THAT LEGAL COUNSEL BE RETAINED BY CLIENT BEFORE ENTERING INTO THIS AGREEMENT TO EXPLAIN CLIENT'S RIGHTS, AND THE LIMITATIONS, AND RESTRICTIONS IMPOSED BY THIS AGREEMENT. CLIENT AGREES THAT FAILURE OF CLIENT TO RETAIN SUCH COUNSEL SHALL BE A KNOWING WAIVER OF LEGAL COUNSEL AND SHALL NOT BE ALLOWED ON GROUNDS OF AVOIDING ANY PROVISION OF THIS AGREEMENT.

19.5 If CLIENT is a residential builder or residential developer, CLIENT shall indemnify, defend and hold harmless ECS against any and all claims or demands due to injury or loss initiated by one or more homeowners, unit-owners, or their homeowners' association, cooperative board, or similar entity against CLIENT which results in ECS being brought into the dispute.

20.0 CONSEQUENTIAL DAMAGES

20.1 CLIENT shall not be liable to ECS and ECS shall not be liable to CLIENT for any consequential damages incurred by either due to the fault of the other, regardless of the nature of the fault, or wherever committed by the CLIENT or ECS, their employees, consultants, agents, contractors or subcontractors, or whether such liability arises in breach of contract or warranty, tort (including negligence), Statute, or any other cause of action. Consequential damages include, but are not limited to, loss of use and loss of profit.

20.2 ECS shall not be liable to CLIENT, or any entity engaged directly or indirectly by CLIENT, for any liquidated damages due to any fault, or failure to act, in part or in total by ECS, its employees, agents, or subcontractors.

21.0 SOURCES OF RECOVERY

21.1 All claims for damages related to the Services provided under this AGREEMENT shall be made against the ECS entity contracting with the CLIENT for the Services, and no other person or entity. CLIENT agrees that it shall not name any affiliated entity including parent, peer, or subsidiary entity or any individual officer, director, or employee of ECS, unless such claims are based on acts unrelated to the provision of Services under this AGREEMENT.

21.2 CLIENT agrees that it will not seek Damages from any individual associated with ECS as an officer, principal, partner, employee, or owner, from any and all claims or liability for injury or loss that would require such individual to relinquish personal assets to satisfy such claim.

22.0 THIRD PARTY CLAIMS EXCLUSION

22.1 This AGREEMENT shall not create any rights or benefits to parties other than CLIENT and ECS. No third-party shall have the right to rely on ECS' opinions rendered in connection with ECS' Services without both CLIENT'S and ECS' written consent and the third-party's agreement to be bound to the same terms and conditions contained in this AGREEMENT as CLIENT, and third-party's agreement that ECS' Scope of Services performed is adequate.

23.0 DISPUTE RESOLUTION

23.1 All claims, disputes or controversies ["Disputes"] arising out of, or in relation to the interpretation, application or enforcement of this AGREEMENT shall be decided as follows:

23.1.1 CLIENT and ECS agree to attend a dispute resolution meeting within fourteen (14) days of identification of a Dispute by either party. CLIENT and ECS agree to negotiate in good faith to resolve the Dispute.

23.1.2 Should negotiation fail to resolve the dispute, CLIENT and ECS agree to mediate their dispute via a mediator selected by either party, and acceptable to both parties.

23.1.3 Should mediation fail to result in resolution of the Dispute, CLIENT and ECS agree that litigation may be brought by either party.

23.2 Should third-party dispute resolution be required, through mediation or litigation, the non-prevailing party shall reimburse the prevailing party for the prevailing party's documented legal costs, in addition to whatever other judgments or settlement sums

may be due. Such legal costs include, but are not be limited to, reasonable attorney's fees, court costs, forensic consultants and expert witness fees, and other documented expenses.

23.3 Where legal action is brought by either party to resolve a dispute, the claim shall be brought and tried in the judicial jurisdiction of the county in which ECS' office contracting with the CLIENT is located. CLIENT waives the right to remove any litigation action to any other jurisdiction, unless mutually agreed to by both parties.

23.4 This AGREEMENT including all matters related to performance and remediation shall be interpreted according to the substantive Laws of the state of Virginia (but not including its choice of law rules).

24.0 CURING A BREACH

24.1 A party that believes the other has materially breached this AGREEMENT shall issue a written termination notice to the other, identifying the cause for termination within five (5) business days of identifying such cause. Both parties shall then bargain promptly and in good faith to cure such cause. If an acceptable cure can be achieved within fourteen (14) calendar days from the date of the termination notice, the parties shall commit their understandings to writing and termination shall not occur.

24.2 Either party may waive any right provided by this AGREEMENT in curing an actual or alleged breach; however, such waiver shall not affect future application of such provision or any other provision.

25.0 TERMINATION

25.1 CLIENT or ECS may terminate this AGREEMENT for breach of this AGREEMENT, or for any other reasons which may arise. In the event of termination, the party effecting termination shall so notify the other party in writing, and termination shall become effective fourteen (14) calendar days after receipt of the termination notice.

25.2 Irrespective of which party shall effect termination, or the cause therefore, ECS shall promptly render to CLIENT a final invoice and CLIENT shall immediately compensate ECS for Services rendered and costs incurred, in accordance with ECS' prevailing Fee Schedule and expense reimbursement policy. Services shall include those rendered up to the time of termination, as well as those associated with termination itself, including without limitation, demobilizing, modifying schedules, and reassigning personnel.

26.0 TIME BAR TO LEGAL ACTION

26.1 Unless prohibited by Law, and notwithstanding any Statute that may provide additional protection, CLIENT and ECS agree that claims by either party arising out of this AGREEMENT or the Services provided hereunder shall not be initiated more than two (2) years from the time the party knew, or should have known, of the condition giving rise to its claim, and shall under no circumstances be initiated more than three (3) years from the date of substantial completion of ECS' Services.

27.0 ASSIGNMENT

27.1 Except for Services normally or customarily subcontracted by ECS in the performance of its Services including, but not limited to surveyors, specialized consultants, drilling and excavating subcontractors, and testing laboratories, neither the CLIENT nor ECS may delegate, assign, sublet or transfer its duties, responsibilities or interests in this AGREEMENT without the written consent of the other party.

28.0 SEVERABILITY

28.1 Any provision of this AGREEMENT later held to violate a Law, Statute, or Regulation, shall be deemed void, and all remaining provisions shall continue in full force and effect. CLIENT and ECS shall endeavor to quickly replace a voided provision with a valid substitute that expresses the intent of, or at least addresses, the issues covered by the original provision.

29.0 TITLES

29.1 The titles used in this AGREEMENT are for general reference only and are not part of the AGREEMENT.

30.0 SURVIVAL

30.1 All obligations arising prior to the termination of this AGREEMENT and all provisions of this AGREEMENT allocating responsibility or liability between the CLIENT and ECS shall survive the substantial completion of Services and the termination of this AGREEMENT.

31.0 ENTIRE AGREEMENT

31.1 This AGREEMENT including the Scope of Services and Professional Fees and all exhibits, appendixes, and other documents appended to it, constitute the entire AGREEMENT between CLIENT and ECS. CLIENT acknowledges that all prior understandings and negotiations are superseded by this AGREEMENT. CLIENT acknowledges acceptance of these terms by submitting a CLIENT Work Authorization to ECS.

31.2 CLIENT and ECS agree that subsequent modifications to this AGREEMENT shall not be binding unless made in writing and signed by authorized representatives of both parties.

31.3 All preprinted Terms and Conditions on CLIENT'S purchase order or Work Authorization, or other service acknowledgement forms, are inapplicable and superseded by this AGREEMENT.

31.4 If CLIENT fails to provide ECS with a signed copy of this AGREEMENT or a Work Authorization, by the act of authorizing and accepting the services of ECS, CLIENT agrees to be fully bound by the terms of this AGREEMENT as if signed by CLIENT.

< END OF TERMS AND CONDITIONS OF SERVICE >