



3984-Proposal-Sound-Acton.doc

June 16, 2014

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Mr. Scott Mutch
Zoning Enforcement Officer & Assistant Town Planner
Town of Acton Planning Department
472 Main Street
Acton, MA 01720

**Subject: Proposal – Sound Level Analysis
Outdoor Wood Manufacturing Operation – Acton, MA**

Dear Mr. Mutch:

Epsilon Associates, Inc. (Epsilon) is pleased to provide this proposal to the Town of Acton for a sound level analysis for the proposed outdoor wood processing operation at 848 Main Street. It is Epsilon’s understanding that wood processing is currently occurring in an area of the site and as part of the proposed conditions will be relocated to an area of the site farther away from the neighboring properties. The purpose of this analysis is to address the neighboring abutters concerns regarding noise associated with the proposed use of the site. Therefore, the sound analysis will address the items identified in the Request for Quotes including: existing ambient sound levels, current operational sound levels, current compliance status, sound propagation, mitigation options, and recommended compliance evaluation approaches.

SCOPE OF SERVICES

Task 1 – Background Sound Level Measurements

Octave band and broadband A-weighted (dBA) sound levels will be measured for a minimum of two (2) 20 minute periods at two residential locations near 848 Main Street. These locations are the northern property line / 47 Heartland Way and 31 Heartland Way. The Town of Acton or Trudeau Homes International (THI) will coordinate access to these private properties. Measurements will take place on a weekday between 7:00 a.m. and 3:30 p.m. which are the hours of operation of the Trudeau Homes International Warehouse. Epsilon will coordinate the scheduling of

these measurements with THI to allow for the collection of sound level data during periods with operations shutdown. One acoustical scientist will be at the site during the measurement program and will rotate between locations.

The sound levels will be measured using two Larson Davis model 831 Type 1 sound level meters or equivalent that will produce values of various noise measurement parameters including the L_{eq} , L_{max} , L_{10} , L_{50} , and L_{90} . These meters meet Type 1 S1.4-1983 standards for sound level meters. The sound level meters will be calibrated before and after the measurement program using the manufacturer's sound calibrator or equivalent. Epsilon personnel will make note of the sound sources in the vicinity during the measurement program and collect periodic meteorological data using hand-held instrumentation. Monitoring cannot take place under high winds (over 12-15 mph) or during precipitation. Monitoring planned for a day with these weather conditions will need to be rescheduled.

Task 2 – Operational Sound Level Measurements

Operational sound level measurements will be measured at the two locations described in Task 1. It is anticipated that the operational measurements will occur on the same day as the background measurements between the hours of 7:00 a.m. and 3:30 p.m. The outdoor wood manufacturing business will be in full operation for this measurement program with measurements during a minimum of the following phases: unloading, loading, sawing, and splitting. The measurement duration will vary depending on the operational phase. Sound levels will be measured concurrently at the two locations. The acoustical scientist will rotate between locations during the measurement program and will be in close contact with a THI representative during the program who will provide information on the operational condition. Measurements will be taken using the equipment described in Task 1.

OPTIONAL TASK - Sound levels could be measured at a third location which would be at a reference distance to the equipment or activity during the operational measurements. This would provide useful sound level data for sound level modeling if significant mitigation is necessary. A second acoustical scientist would be onsite for these measurements.

Task 3 – Compliance Evaluation

Current operational sound levels under each of the phases will be compared to the ambient sound level measurements to determine compliance with the

Massachusetts Department of Environmental Protection Noise Policy. The L_{90} sound level metric will be used to define the ambient background sound level while the operational sound level will be the L_{max} attributable to activities at the site.

Task 4 – Sound Level Assessment Report

The results of the sound level measurement program and compliance evaluation under existing conditions will be summarized in a technical report. The report will include:

- Definition of terms,
- Description of field program,
- Discussion of applicable noise regulations,
- Description of field equipment,
- Figures depicting equipment and measurement locations with an aerial imagery used for a basemap,
- Results of the monitoring program in tabular form,
- Compliance evaluation,
- Discussion on industry standards related to sound propagation,
- Discussion on general reductions from barriers,
- Discussion of potential mitigation options,
- List of components for a compliance evaluation program, including the evaluation of mitigation, along with approximate costs.

The report will be submitted in a timely manner following the completion of the sound level measurement program. The report will be submitted electronically as an Adobe PDF document.

OPTIONAL TASK - Incorporate reference sound level measurements into a sound level modeling analysis using the CadnaA software package in order to evaluate equipment relocation and/or barriers at residential locations.

Task 5 – Attendance at One Public Hearing

Epsilon will attend one public hearing meeting with the Board of Selectmen for the project where Epsilon provides an overview of the analysis and answers questions concerning the document. A PowerPoint presentation is not anticipated for this hearing.

EXPERIENCE

Epsilon staff has extensive experience in providing community sound level impact assessments for projects throughout New England. The consultants at Epsilon have demonstrated their expertise through presenting at major conferences and providing expert testimony. Individual resumes highlighting key project experience for Epsilon staff that will be involved in this project are available upon request.

COST OF SERVICES

The cost for the Scope of Services for the five tasks described above is approximately \$9,500. This cost-estimate excludes the optional tasks identified. The services will be provided on a Time and Materials basis in accordance with the attached Epsilon 2014 Standard Consulting Rates and Consulting Services Agreement. The cost includes labor, materials, travel expenses and noise equipment fees. This estimate also assumes that once a site visit is under way, that it is not canceled or postponed for any reasons out of the control of Epsilon. The date for the measurement program will be mutually agreed upon if and when all parties are in agreement to proceed with the study. Work beyond this Scope (additional meetings, optional tasks, etc.) can be added via a change order or proposal revision prior to its commencement. Work verbally authorized by you beyond this Scope will be charged on a Time & Materials basis at our current rates.

This proposal can be accepted by signing in the space below and returning a copy to us or by issuance of a Purchase Order. If you have any questions on this proposal, please feel free to call me at (978) 461-6205, or e-mail me at rlampeter@epsilonassociates.com.

Sincerely,

EPSILON ASSOCIATES, INC.



Richard Lampeter, INCE
Senior Consultant

Attachments: Standard Consulting Agreement and 2014 Rates

Mr. Scott Mutch
Town of Acton Planning Department
June 16, 2014

Approved by:

Accepted by:

EPSILON ASSOCIATES, INC.

TOWN OF ACTON

TAW O'dell
Name

Name

Principal
Title

Title

June 16, 2014
Date

Date

1. **Work to be Performed:** EPSILON ASSOCIATES (Epsilon) will perform the services set forth in the proposal, and such additional services as Epsilon and the Client may jointly agree in writing (collectively, the "Services"). The costs for such Services will be computed and invoiced monthly in accordance with Epsilon's Standard Consulting Rates in effect at the time the Services are performed. If the Client fails to make payment when due, Epsilon may, upon seven days written notice to the Client, suspend performance of services under this Agreement.
2. **Changes:** Epsilon's estimated cost and proposed schedule are based on Epsilon's best judgment of the requirements known at the time of the proposal. Successful completion within cost and schedule limits can be influenced by changes in the scope of services and schedule as dictated by Client needs and by presently unforeseen circumstances. Epsilon will notify the Client in advance if schedule or cost is expected to exceed the estimate. In such event, the Client may wish to (i) authorize additional funds to complete the services as originally defined, (ii) redefine the scope of services in order to fit the remaining funds, or (iii) request that services be stopped at the specific expenditure level.
3. **Standard of Care:** Epsilon represents that it will perform its Services in accordance with the standards of care and diligence normally practiced by professional consulting firms performing Services of a similar nature in the same locale. It is understood that Epsilon makes no warranty, either expressed or implied, as to its findings, designs, recommendations, specifications, or professional advice or opinion.
4. **Independent Status:** Epsilon will serve as an independent consultant to Client and not its agent or employee. It is understood that Epsilon may retain subconsultants to perform specialized Services. Should it be determined appropriate or necessary to rely on a subconsultant for other purposes, Epsilon will obtain the written confirmation from Client.
5. **Assignment:** Client will not delegate, assign, or transfer any interest in this Agreement without the written consent of Epsilon.
6. **Delays:** Epsilon will perform its professional services in a manner consistent with sound professional practices. Epsilon is not responsible for delays caused by factors beyond its reasonable control, including but not limited to delays because of strikes, lockouts, accidents, acts of God, failure of any governmental or other regulatory authority to act in a timely manner, failure of the Client to furnish timely information or approve or disapprove of Epsilon's services or work product promptly, or delays caused by faulty performance by the Client or its other consultants. When such delays beyond Epsilon's reasonable control occur, the Client agrees Epsilon is not responsible for damages, nor shall Epsilon be deemed to be in default of this Agreement.
7. **Insurance:** During the period that services are performed under this Agreement, Epsilon will maintain the following insurance: (1) Workers Compensation coverage in accordance with the laws of the Commonwealth of Massachusetts; (2) Commercial General Liability with a limit of \$1,000,000 per occurrence and a \$2,000,000 general aggregate; (3) Non-owned and Hired Automobile Liability coverage with a combined single limit of \$1,000,000 and (4) Professional Liability coverage with a \$2,000,000 aggregate limit (claims made basis). Client agrees that Epsilon will not be liable for any loss, damage or liability arising out of this Agreement beyond the limits of available insurance coverage.

8. **Indemnification:** Client will indemnify and hold harmless Epsilon, its employees, officers, directors, and subconsultants from and against all claims and actions, including reasonable attorney fees, arising out of or related to damages or injuries to persons or property related or connected to acts of the Client or any of its employees, officers, directors, subconsultants or agents.
9. **Hazardous Substances/Hazardous Waste:** Client acknowledges that Epsilon has no responsibility as a generator, treater, storer, transporter, arranger, or disposer of hazardous or toxic substances that may be found or identified at the site; or that may be directly or indirectly generated by the Client or others; or that were on the site prior to Epsilon's Services provided in accordance with this Agreement.

Accordingly, the Client will indemnify and hold harmless Epsilon, its officers and employees from and against all claims and actions, including reasonable attorneys fees, arising out of hazardous substances/hazardous waste issues related to this Agreement.

10. **Invoicing:** Project costs will be invoiced monthly in Epsilon Associates' standard format. Costs for sub-consultants, analytical laboratories, travel, equipment rentals, offset printing, large format plots, color printing, large volume report production, couriers, overnight delivery and other necessary project expenses will be billed at actual cost plus 10%. A communications charge equal to 3% of labor billings will be added to each invoice to cover the costs of routine copying, postage, telephone charges, fax and normal supplies. Terms are net 30 days from the date of invoice issuance. An interest charge of 12% per annum will be added to all delinquent bills. For delinquent accounts, no complete or partial work product will be released to the client or submitted to regulatory agencies on the client's behalf. Further, Epsilon reserves the right to stop work on any delinquent account; subject to written or electronic notice and a three day grace period. Epsilon will have no liability to the client for any direct or indirect damages which may result from the work stoppage.
11. **Termination:** Either party may terminate the Services with or without cause upon 10 days advance written notice. Irrespective of which party shall effect termination, the Client shall within 30 calendar days of termination, pay Epsilon for services rendered and all costs incurred up to the time of termination, as well as those costs associated with the termination itself, in accordance with Epsilon's then-prevailing Standard Consulting Rates.
12. **Disputes:** Excepting legal actions brought by Epsilon to collect overdue payments, any and all controversy or claim arising out of or related to this Agreement, or breach thereof, not settled directly by the parties, shall be settled by binding arbitration in accordance with the then-current commercial arbitration rules of the American Arbitration Association. Client and Epsilon will each bear its own costs of the arbitration proceeding including attorney fees.
13. **Ownership of Documents:** Client acknowledges that Epsilon's reports, field data, field notes, calculations, estimates, and other similar documents ("Records") are instruments of professional service, not products. Epsilon shall retain for its professional use a copy of all data generated, prepared, or furnished to Client. Epsilon will retain these Records for a period of 3 years following completion of services. During this time, Epsilon will reasonably make available the Records to the Client. Epsilon may charge a reasonable fee for retrieving, and/or copying such Records.

Client will not use any of Epsilon's data, documents, or reports for any purpose other than its original purpose as defined by the Agreement. Client has no rights to incomplete or partial data.

- 14. Reuse of Project Documents:** All documentation furnished to the Client is intended for the benefit of the Client and is not intended or represented to be suitable for reuse by the Client or others. Any reuse without the specific written consent of Epsilon will be at user's sole risk and without liability and legal exposure to Epsilon. Client agrees to indemnify and hold Epsilon harmless from any and all liabilities, losses, costs, or expenses suffered by Epsilon in connection with Client's unauthorized reuse of project documents.
- 15. Entire Agreement, Modifications, Headings, Severability:** The parties acknowledge that this Agreement constitutes the entire Agreement between them and supersedes all prior representations, agreements, and understandings, whether verbal or written, between the parties with respect to its subject matter. If any element of this Agreement is later held to violate the law or a regulation, or whose insurability cannot be confirmed by Epsilon, it shall be deemed void, and all remaining provisions shall continue in force. This Agreement shall be governed by the law of the Commonwealth of Massachusetts.



EPSILON ASSOCIATES, INC. 2014 STANDARD CONSULTING RATES

Charges for services performed by EPSILON ASSOCIATES, Inc. will be billed at the hourly rates in effect at the time the services are performed. Standard consulting rates for 2014 are listed below:

Managing Principal, Principal I	\$255 per hour
Principal II, Director	\$235 per hour
Principal III, Associate, Senior Consultant I	\$215 per hour
Associate, Senior Consultant II	\$195 per hour
Senior Consultant III; Senior Engineer, Scientist, Planner I	\$177 per hour
Senior Engineer, Scientist, or Planner II	\$160 per hour
Senior Engineer, Scientist, or Planner III	\$145 per hour
Senior Engineer, Scientist or Planner IV, Project Engineer, Scientist, or Planner I	\$135 per hour
Project Engineer, Scientist or Planner II	\$125 per hour
Project Engineer, Scientist or Planner III	\$115 per hour
Project Engineer, Scientist, or Planner IV, Staff Engineer, Scientist or Planner I,	\$105 per hour
Staff Engineer, Scientist, or Planner II, Admin I	\$95 per hour
Staff Engineer, Scientist, or Planner III, Admin II	\$88 per hour
Admin III	\$77 per hour
Admin IV	\$50 per hour

Expert testimony which is required as part of a broader consulting assignment will be billed at standard rates. Assignments which are essentially limited in scope to expert testimony and the attendant preparation, will be billed at 150% of the standard rates.

Expenses

- ◆ Costs for sub-consultants, analytical laboratories, travel, equipment rentals, offset printing, large format plots, color printing, large volume report production, couriers, overnight delivery and other necessary project expenses will be billed at actual cost plus 10%.
- ◆ A communications charge equal to 3% of labor billings will be added to each invoice to cover the costs of routine copying, postage, telephone charges, and normal supplies.

Invoicing

- ◆ Project costs will be invoiced monthly in Epsilon Associates' standard format. Terms are net 30 days from the date of invoice issuance. An interest charge of 12% per annum will be added to all delinquent bills. For delinquent accounts, no complete or partial work product will be released to the client or submitted to regulatory agencies on the client's behalf. Further, Epsilon reserves the right to stop work on any delinquent account; subject to written or electronic notice and a three day grace period. Epsilon will have no liability to the client for any direct or indirect damages which may result from the work stoppage.