

April 29, 2009

SEB, LLC 165 Chestnut Hill Avenue; Unit 2 Brighton, MA 02135

Attention:

Mr. Geoffrey Engler

Reference:

192 Lexington Street; Newton, Massachusetts

Chemical Testing Results, Massachusetts Contingency Plan (MCP) Regulatory

Compliance and Preliminary Impacts to Site Development

Ladies and Gentlemen:

This letter presents the results of chemical testing conducted on six (6) soil samples obtained at the site of the proposed residential development to be located at 192 Lexington Street in Newton, Massachusetts. Furthermore, the results of the chemical testing as they relate to Massachusetts Contingency Plan (MCP) regulatory compliance and potential impacts to site development are discussed. This letter was prepared in accordance with the recent request of Mr. Geoffrey Engler of SEB, LLC. These services are subject to the limitations contained in Appendix A. Refer to the Project Location Plan (Figure 1) for the general site location.

Background

The subject site fronts onto Lexington Street to the northwest and consists of an approximate 1.25-acre parcel of land bounded by residential properties. An existing 1-story residential structure occupying an approximate 2,200 square-foot plan area is centrally located on the site. Existing ground surface across the site is generally level, varying from about Elevation +55 to Elevation +58.

It is understood that the proposed site development includes the construction of six, two-story woodframed residential structures occupying approximate 730 to 1,770 square-foot plan areas. The proposed buildings may contain a single below-grade level, the lowest level slab of which could be located between about 4 to 8 feet below existing grade. The development also includes the construction of paved parking areas and the installation of utilities, including a below-grade stormwater recharge system.

During March 2009, McPhail Associates monitored the performance of seven borings across the area of the proposed buildings. The purpose of the borings was to obtain subsurface information for foundation design purposes and to facilitate collection of soil samples for chemical analyses to pre-characterize the soil materials located within the footprint of the proposed buildings for off-site disposal. Approximate locations of the explorations are as indicated on the enclosed Subsurface Exploration Plan, Figure 2.

McPhail Associates is preparing a Phase I/II Environmental Site Assessment for the site on behalf of SEB, LLC. During a walkthrough of the site, it was relayed to our representative that a 1,000 gallon underground storage tank (UST) utilized for the storage of home heating oil is located on the northwestern side of the residence. The presence of a UST on the subject site is considered to be a Recognized Environmental Condition (REC). Furthermore, our research of the site history indicates that portions of the site were formally occupied by wetlands which have been filled in with fill material. The presence of fill material on the site is also considered to be an REC.



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Chemical Test Results and Regulatory Requirements

Following the field investigatory work, representative soil samples obtained from within the planned depth of excavation for the proposed buildings were submitted for detailed chemical analyses. Five (5) composite samples of the fill material and one (1) composite sample of the natural sand deposit were chemically analyzed for the presence of pesticides, poly-chlorinated biphenyls (PCBs), volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), total RCRA-5 metals, total petroleum hydrocarbons (TPHs), pH, flashpoint and reactivity. Chemical test results are summarized in Table 1 and the laboratory data packages are contained in Appendix B.

The results of the chemical analyses were compared to the Massachusetts Department of Environmental Protection (DEP) RCS-1 Reportable Concentrations and the DEP Notification Criteria contained in the Massachusetts Contingency Plan. The purpose of the comparison was to determine if the detected concentrations of the analytes tested constitute a release that requires notification of the Massachusetts DEP, and thus requires implementation of response actions under the MCP. The chemical test data was also compared to off-site disposal criteria contained in relevant DEP policies and regulations.

The chemical testing results indicate the following items warrant notification to the DEP under the provisions of the MCP, and require further investigation and chemical testing to determine the extent of the reportable releases:

- A 120-day reportable release of petroleum-related compounds and polynuclear aromatic hydrocarbons (PAHs) was detected in the composite fill sample obtained from borings B-1 and B-2 from a depth of 0 to 4 feet below ground surface; and
- A 120-day reportable release of PAHs was detected in the composite soil sample obtained from boring B-6 from a depth of 0 to 10 feet below ground surface.

The reportable releases noted above require reporting to the DEP on a Release Notification Form (RNF) by the site owner within 120 days of obtaining knowledge of the releases. Excavation of material impacted by the reportable releases will require the preparation and submittal of a Release Abatement Measure (RAM) Plan prior to the commencement of excavation. Removal and off-site transport and disposal of release-impacted materials will require the implementation of the Bill of Lading procedure. Further, documentation of the successful completion of the RAM excavations as indicated by chemical testing of soil samples obtained at the limits of the RAM excavations will be required. A RAM Completion Report will be required on completion of the RAM activities. A Risk Characterization and a Response Action Outcome Statement or a Phase I Report and Tier Classification must be submitted to the DEP within one year of the date that the DEP received the RNF. If response actions cannot be completed within the one year time frame, clean-up activities must be performed under the DEP's "Phasing" of response actions after submittal of a Phase I Report and Tier Classification.

Soil Disposal

Based upon the results of chemical analyses performed on fill and natural deposit samples obtained from the borings, the existing fill materials and the underlying natural sand deposit present on the project site exhibit levels of some VOCs, SVOCs, PAHs, TPHs, and/or metals in concentrations which exceed those permitted by the current Department of Environmental Protection (DEP) policies for uncontrolled off-site disposal. These materials must be disposed off-site as Regulated soils.



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Based upon the pre-construction soil characterization data, the following categories of material requiring off-site re-use or disposal have been defined:

- REGULATED A: Material which is characterized by all of the following: total mercury less than 10 mg/kg, total lead less than 1,000 mg/kg, TCLP lead less than 5 mg/l, total VOC concentrations below 4 mg/kg, Total PAH concentrations below 100 mg/kg and TPH concentrations below 2,500 mg/kg, is classified as Regulated A. Material classified as Regulated A shall be re-used as daily cover at an in-state unlined landfill.
- REGULATED C: Material which is characterized by the following: mercury and lead concentrations below 10 mg/kg and 1,000 mg/kg, respectively, and TCLP lead concentrations below 5 mg/l, total VOC levels above 10 mg/kg, total PAH levels above 100 mg/kg and/or TPH levels above 5,000 mg/kg. Material classified as Regulated C shall be recycled at an asphalt batch plant.

Additional chemical testing will need to be performed on soil samples obtained from within the footprint of Buildings 1 and 6, and the proposed stormwater recharge system, in order to meet disposal facility requirements.

Preliminary Impacts to Site Development

Based on the proposed future use of the site as residential, it may be necessary to incorporate precautions into the site design which restrict the potential for dermal contact from the existing fill soils, such as providing paving, or a thickness of "clean" soil overlying the existing fill material. Furthermore, in order to achieve a level of No Significant Risk for future foreseeable site activities and uses, an Activity and Use Limitation (AUL) may need to be implemented to ensure that the soil below the "clean" cover remains inaccessible and that the exposure pathways remain incomplete. Activities which may result in the disturbance of impacted soil below the "clean" cover may need to be restricted in order to prevent exposures which may pose a Significant Risk to sensitive receptors.

Recommendations

Additional sampling and chemical testing is required in order to assess the nature and extent of the reportable releases. In order to determine if the site groundwater has been impacted by the above reportable releases, installation of a monitoring well and chemical testing of a groundwater sample is recommended. Furthermore, a subsurface investigation and chemical testing of soil is recommended to be performed in the vicinity of the existing underground storage tank (UST) which is located on the north side of the existing structure and within the footprint of the proposed stormwater recharge system.



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We trust that the above is sufficient for your present requirements. Should you have any questions concerning the above, please do not hesitate to call us.

Very truly yours,

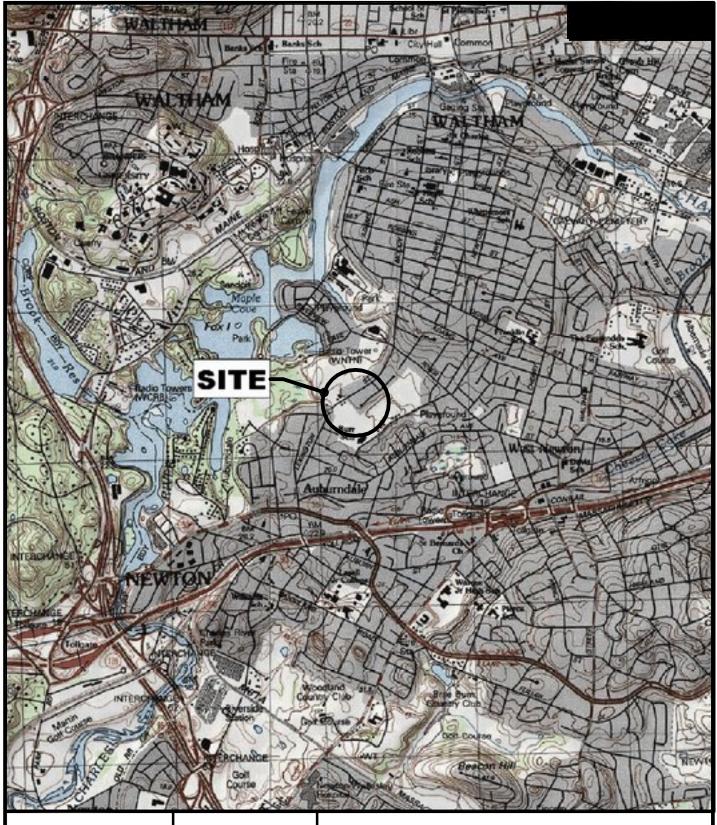
MCPHAIL ASSOCIATES, INC.

Jonathan W. Patch, P.E.

Thomas J. Fennick, P.E., L.S.P.

Enclosures

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2269 Massachusetts Avenue Cambridge, MA 02140 617/868-1420 617/868-1423 (Fax)

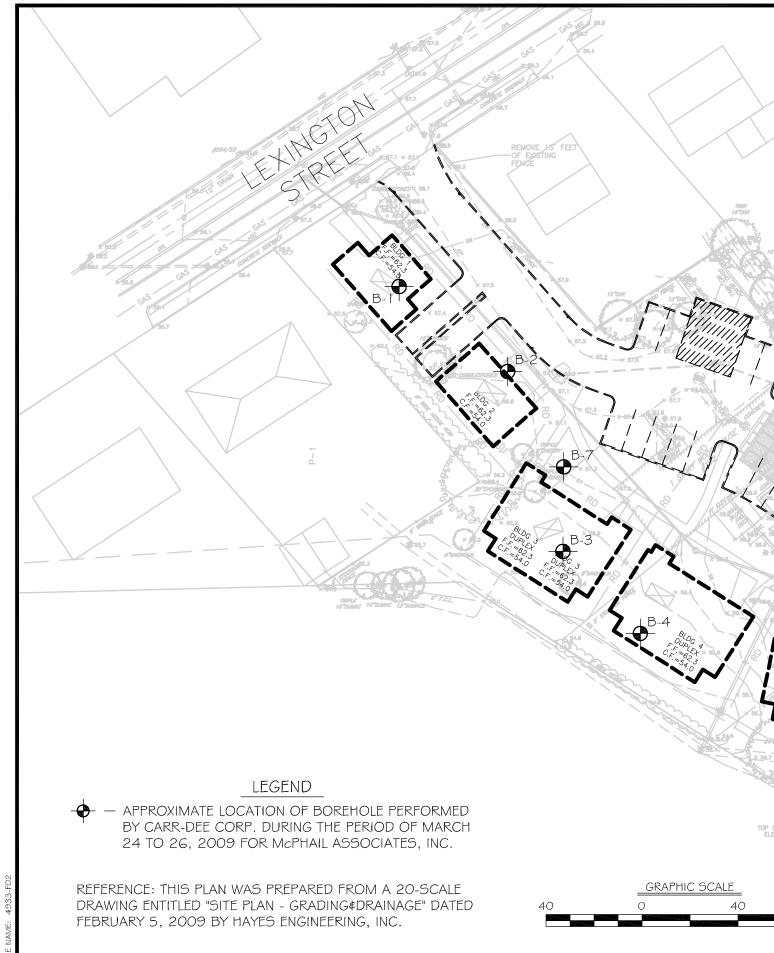


PROJECT LOCATION PLAN

192 LEXINGTON STREET

NEWTON

MASSACHUSETTS





May 19, 2009

SEB, LLC 165 Chestnut Hill Avenue; Unit 2 Brighton, MA 02135

Attention:

Mr. Geoffrey Engler

Reference:

192 Lexington Street; Newton, Massachusetts

Proposal for Additional Geotechnical/Environmental Engineering Services

Ladies and Gentlement

In accordance with the request issued by Mr. Tim McHale and SEB, LLC, we are pleased to present our proposal for performing additional geotechnical/environmental engineering services for the proposed residential development to be constructed at 192 Lexington Street in Newton, Massachusetts. The proposed scope of services is being provided to address issues pertaining to the reportable levels of oil and/or hazardous material identified from our previous subsurface explorations and chemical testing. From this scope of work, we will be prepared to provide an action plan on how to remediate the site so it conforms to DEP standards. The proposed scope of work contained herein will be performed under the supervision of a Licensed Site Professional (LSP).

Overview

Specifically, McPhail Associates, Inc. proposes to perform additional subsurface explorations and chemical testing to define the extent of a reportable release of polynuclear aromatic hydrocarbon (PAH) in the vicinity of borings B-1, B-2 and B-6. Also, additional subsurface explorations and chemical testing are proposed to define the extent of a reportable release of petroleum hydrocarbons in the vicinity of borings B-1 and B-2. Furthermore, a subsurface investigation and chemical testing of soil is recommended to be performed within the footprint of the proposed stormwater recharge system. Finally, this proposal provides a cost estimate for the removal of an existing 1,000-gallon underground storage tank (UST) which is located adjacent to the north side of the existing structure.

Background

The subject site fronts onto Lexington Street to the northwest and consists of an approximate 1.25-acre parcel of land bounded by residential properties. An existing 1-story residential structure occupying an approximate 2,200 square-foot plan area is centrally located on the site. Existing ground surface across the site is generally level, varying from about Elevation +55 to Elevation +56.

It is understood that the proposed site development includes the construction of six, two-story woodframed residential structures occupying approximate 730 to 1,770 square-foot plan areas. The proposed buildings may contain a single below-grade level, the lowest level slab of which could be located between about 4 to 8 feet below existing grade. The development also includes the construction of paved parking areas and the installation of utilities, including a stormwater recharge system.

During March 2009, McPhail Associates monitored the performance of seven borings across the area of the proposed buildings. The purpose of the borings was to obtain subsurface information for foundation design purposes and to facilitate collection of soil samples for chemical analyses to pre-characterize the soil materials located within the footprint of the proposed buildings for off-site disposal. A total of six (6)



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soil samples were obtained by McPhall Associates and submitted to the laboratory for chemical testing. The results of the chemical analyses were compared to the Massachusetts Department of Environmental Protection (DEP) RCS-1 Reportable Concentrations and the DEP Notification Criteria contained in the Massachusetts Contingency Plan (MCP) for the purpose of determining if the detected concentrations of the analytes tested constitute a release that requires notification of the Massachusetts DEP, and thus requires implementation of response actions under the MCP. The chemical test data was also compared to off-site disposal criteria contained in relevant DEP policies and regulations.

The chemical testing results indicate the following items require further investigation and chemical testing to determine the extent of the reportable releases:

- A 120-day reportable release of petroleum-related compounds and polynuclear aromatic hydrocarbons (PAHs) was detected in the composite soil sample obtained from borings B-1 and B-2 from a depth of 0 to 4 feet below ground surface; and
- A 120-day reportable release of PAHs was detected in the composite soil sample obtained from boring B-6 from a depth of 0 to 10 feet below ground surface.

Task 1 - Additional Subsurface Investigation and Chemical Testing

Additional sampling and chemical testing is required in order to assess the nature and extent of the reportable releases. Furthermore, in order to determine if the site groundwater has been impacted by the above reportable releases, installation of a monitoring well and chemical testing of a groundwater sample is recommended. In addition, test pits are recommended to be performed within the footprint of the proposed stormwater recharge system to assess the soils for off-site disposal.

Therefore, it is recommended that a program of additional subsurface explorations be performed to address the above reportable releases of petroleum hydrocarbons and PAHs. Accordingly, we propose to perform a subsurface exploration program consisting of twenty-nine (29) machine-excavated test pits and four (4) borings in order to obtain additional soil samples, and a groundwater sample, for chemical testing.

The test pits located in the vicinity of borings B-1 and B-2 and the stormwater recharge system would be advanced to depths of about five feet below ground surface. The test pits performed in the vicinity of boring B-6 would be advanced to depths of about 10 feet below ground surface. The test pits would be backfilled and graded even with the existing grades upon completion, however, the ground surface e.g. grass or landscaping would not be restored. We estimate the cost of an excavating contractor to complete the test pits to be about \$4,500 and the duration of the exploration program to be three days.

Three (3) borings would be located in the vicinity of boring B-6 and soil samples would be obtained at two-foot intervals from ground surface to a depth of about 10 feet, and at five-foot intervals from 10 to 25 feet. An observation well would be installed in one of the completed borings in order to obtain a groundwater sample for chemical testing. Furthermore, one (1) boring would be performed within the existing driveway in the vicinity of boring B-2. The cost of a drilling subcontractor to perform the borings with a track-mounted drilling and install the monitoring well is estimated to be \$4,500. It is anticipated that two days of drilling will be required to complete the boreholes and install the monitoring well.

In addition, the chemical testing results indicate the following additional chemical testing is required to complete the characterization for off-site disposal:



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- Chemical testing for the presence of TCLP lead is required for the soil sample obtained from boring B-5 due to the detected level of total lead being greater than 100 milligrams per kilogram;
- Testing for the presence of total chromium for the soil sample obtained from borings B-1 and B-2 from a depth of 4 to 12 feet below ground surface indicated a level of total chromium above the DEP's applicable RCS-1 threshold. In regards to chromium, it is noted that total chromium is a measure of the sum of the concentrations of trivalent chromium (chromium III) and hexavalent chromium (chromium VI) which have RCS-1 soil standards of 1,000 mg/kg and 30 mg/kg, respectively. Therefore, to further assess the level of chromium detected and to determine if a reportable condition exists, additional chemical testing for the presence of hexavalent chromium (chromium VI) is required for the sample; and
- Submitting three (3) additional soil samples obtained from the footprint of the stormwater recharge system and buildings 1 and 6 for characterization for off-site disposal.

In conjunction with the above, we propose to provide the following general/ronmental engineering services:

- Perform a site visit to lay out the test pit and borehole locations;
- Subcontract with qualified excavation and drilling subcontractors to perform the exploration program and clear utilities with Dig-Safe;
- Provide a qualified field engineer to monitor the explorations, to obtain representative soil samples, to monitor the groundwater levels within the completed explorations and observation well, and to make modifications to the subsurface exploration program depending upon actual conditions encountered:
- Screen soil samples from the borings and test pits with an HNU Systems PI-101 Photoionizer for the presence of volatile organics;
- Prepare and submit to a DEP-certified chemical testing laboratory soil samples obtained from the subsurface explorations for analysis for the presence of extractable petroleum hydrocarbons (EPH), volatile organic compounds (VDCs), and polynuclear aromatic hydrocarbons (PAHs).

It is anticipated that up to 40 samples will be tested for PAHs, up to 10 samples will be tested for EPH with target PAHs, and up to 5 samples will be tested for VOCs. However, the actual number of soil samples to be tested for each of the above parameters may vary based on actual subsurface conditions encountered during the expiorations, and on the results of the TVOC field screening;

- Submit the composite soil sample obtained from boring B-5 for chemical testing for the presence of TCLP lead:
- Submit the composite soil sample obtained from borings B-1 and B-2 from a depth of 4 to 12 feet below ground surface for chemical testing for the presence of hexavalent chromium:
- Obtain one (1) groundwater sample from the newty installed monitoring well for chemical analysis
 for the presence of EPH, PAH and VOC;



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- Prepare and submit three (3) soil samples obtained from the explorations to a chemical testing laboratory for analyses for TPH, VOCs, RCRA-5 metals, SVDCs, pesticides/PCB's, pH, reactivity and flashpoint; and
- Assessing the above and incorporating the results into the Phase I/II Environmental Site
 Assessment Report to be prepared by McPhail which is included in our proposal dated March 30,
 2009 as item 6.

The total estimated fee for the above scope of geoenvironmental engineering services is a which includes allowances of \$\frac{1}{2}\$ for the drilling subcontractor, for the excavating subcontractor, and for the chemical testing laboratory. The cost of chemical testing is predicated upon standard turnaround time by the laboratory, which is one week.

Task 2 - Removal and Off-Site Disposal of the Underground Storage Tank

It is understood that an empty 1,000 gallon underground storage tank (UST) utilized for the storage of home heating oil is located on the northwestern side of the existing residence. The presence of a UST on the subject site is considered to be a Recognized Environmental Condition (REC). In lieu of performing a subsurface investigation and chemical testing to determine if the tank may have leaked, it has been requested that we include a scope of work associated with the removal of the UST.

Accordingly, we propose the following scope of work associated with the removal of the UST:

- Assist in a contractual arrangement between SEB, LLC and a qualified contractor to remove the UST and legally dispose of the tank and, if required, its contents. The tank removal contractor will contact the City of Newton Fire Department and obtain the required permits;
- Provide a qualified field representative to monitor the excavation and removal of the underground storage tank, to screen soil samples with an HNU Photoionization Detector for Total Volatile Organic Compounds (TVOC), and obtain representative soil samples from the limits of the tank excavation for chemical testino:
- Prepare and submit up to two (2) samples of the soil obtained from the limits of the tank
 excavation to a chemical testing laboratory for testing for the presence of Extractable Petroleum
 Hydrocarbons (EPH) and either Volatile Organic Compounds (VOC) or Volatile Petroleum
 Hydrocarbons (VPH); and
- 4. Prepare a letter documenting the results of the removal of the underground storage tank and, if a reportable concentration of oil and/or hazardous material (OHM) is detected, indicate if based on the contamination encountered whether an Limited Removal Action (LRA) is feasible or whether the release must be reported to the DEP and assessed under the MCP.

The fee for engineering services would be based on a multiple of 2.5 times salary cost of technical personnel directly attributable to the project plus any direct expenses (e.g. chemical testing, mileage and report reproduction) at cost plus 15 percent. The estimated fee to complete Task 2 is \$5,700 which includes an allowance of \$850 for the chemical testing (Item No. 3). The cost of a tank removal contractor is estimated to be \$3,000 and would be contracted directly by SEC, LLC.



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The provisions of the Massachusetts Contingency Plan (MCP) stipulate that headspace readings equal to or exceeding 100 ppm in a soil sample obtained within 10 feet of a UST and greater than 2 feet below ground surface must be reported to Massachusetts DEP within 72 hours and an MCP Immediate Response Action (IRA) must be implemented. If a 72-hour reporting condition is determined to be present, additional gecenvironmental engineering services will be required, for which a work scope and estimated fees will be provided.

Exclusions and Qualifications

The Client agrees to provide right of entry to the site in order that the subsurface explorations can be performed. White the engineer will take all reasonable precautions to avoid damage to property, subterranean structures or utilities, the Owner agrees to hold the geotechnical engineer harmless for any damages to subterranean structures or utilities not as shown on the plans furnished or evident in the field.

In addition, since the Client agrees that McPhail Associates, Inc. has neither created or contributed to the creation of any hazardous materials, oil, or other environmental pollutants that is now or may be introduced or discovered on the project site in the future, the Client agrees to defend, indemnify, and hold harmless McPhail Associates, Inc., its subcontractors, agents, officers, and employees from and against any and all claims for damages and all associated expenses incurred as a result of claims sustained or alleged by any person or entity other than the client, based upon a release of environmental contaminants or pollutants, any governmental fines or penalties related to environmental contaminants or pollutants, or any bodily injury or property damage caused by the release, removal, assessment, or investigation of hazardous materials associated with the subject project provided that this indemnification will not apply to the extent that any such claims, damages or expenses are the result of McPhail's negligence or wrongful acts or omissions.

The engineer's liability for damages due to professional negligence in performing geotechnical and geoenvironmental engineering services will be limited to an amount not to exceed \$50,000. McPhall Associates, Inc. will increase the limitation of liability for geotechnical and geoenvironmental engineering activities to \$1,000,000 in accordance with the terms and conditions of our policy upon written notice from the Client within len days hereof that he agrees to pay in consideration of this increase in limitation an additional charge of \$1,000.

Invoicing for services would be submitted monthly and payment would be due within 30 days. The Owner acrees to pay interest at the rate of 1.5 percent per month on monies outstanding in excess of 90 days.

We are prepared to commence work immediately upon receipt of written authorization to proceed. To authorize our geotechnical/environmental engineering services as proposed above, please sign and return the enclosed copy of this proposal.



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We appreciate the opportunity to submit this proposal and look forward to being of service to SEB, Tim McHale, Winslow Architects and the remainder of the design team for the proposed 192 Lexington Street project.

Should you have any questions, please contact us.

Very truly yours,

McPHAIL ASSOCIATES, INC.

forther Whiles

Jonathan W. Patch, P.E.

Thomas J. Fennick, P.E., L.S.P.

e: Michiale and Company, Inc. (Mr. Tim McHale)

F:WP5/PROPOSAL'4903 Add Chem Testing Rev4.wpd JWP4/Figon SEB, LLC

BY____

DATE

