



June 4, 2024

Mr. Joe Shriver  
Kenton County Administrator  
1840 Simon Kenton Way  
Covington, KY 41011

***Re: Proposal for Soil Vapor Barrier Design and Oversight  
Former Bavarian Brewery Property  
West 12<sup>th</sup> Street & Simon Kenton Way  
Covington, Kenton County, Kentucky  
Linebach Funkhouser Proposal Number 148-24***

Dear Mr. Shriver:

Linebach Funkhouser, Inc. (LFI) is pleased to provide Kenton County with this proposal in response to your request on May 29, 2024. This proposal outlines a scope and cost to design and oversee the installation of a soil vapor barrier at the Kenton County Administration property located on West 12<sup>th</sup> Street & Simon Kenton Way in Covington, Kentucky.

The tasks necessary to complete the design and oversight of the vapor barrier installation are presented below, followed by associated cost and scheduling information.

## **BACKGROUND**

The subject property is currently operating as the Kenton County Administration Building. Historically, the site was industrial in nature and its uses included operation as the Bavarian Brewery in the mid-1800s and has been used for numerous operations since that time. LFI has previously completed multiple assessments of the property, including a *Phase I Environmental Site Assessment* report dated June 10, 2016, a *Limited Phase II Environmental Site Assessment* report dated August 10, 2016, and a *Property Management Plan (PMP)* dated May 5, 2017. Multiple recognized environmental conditions (RECs) were identified during the course of these assessments, as outlined in the documents. The site was approved into the Kentucky Brownfield Redevelopment Program via the issuance of a *Notification of Concurrence (NOC)* letter dated June 1, 2018. These reports also documented remnant concentrations of poly-aromatic hydrocarbons (PAHs) and metals in the soils of the property. Based upon recent sampling, LFI is recommending that a soil vapor barrier be installed over the new development footprint to address the potential vapor encroachment condition (VEC).

LFI understands that Kenton County is pursuing additional redevelopment of the property by adding a parking structure and above grade apartments.

## SCOPE OF WORK

Based on the potential for a VEC, LFI recommends the following:

### ***Task 1 – Review of Proposed Foundations***

LFI will review the proposed construction drawings for the foundations of the new buildings. Kenton County will provide LFI with AutoCAD files of the proposed foundation, foundation details, and plumbing layout. The preliminary plan for the foundation is interior footers and an exterior stem wall with slab on-grade construction.

### ***Task 2: System Design***

The goal of the system design will be to install a 20-mil vapor barrier under the new construction. The system will not use an active fan to depressurize the subgrade below the slab, but will allow it's installation if future conditions require further mitigation measures. Depending on the final design, subsurface perforated piping may be added to allow a future fan to access remote areas of the slab. Part of this design will require the subgrade to use an open graded subgrade such as #57 stones as opposed to a well graded subgrade such as dense grade aggregate (DGA).

Installation diagrams will also be produced based upon the final foundation design. The vapor barrier design will be in general accordance with EPA recommendations for sub-slab vapor removal. Other industry standards such as EPA Radon Mitigation Standards (EPA 402-R-93-078) may also be used to determine an adequate design. A draft copy of the design will be forwarded to Kenton County for approval before the final design is developed.

### ***Task 3 – Construction Specifications***

LFI will provide AutoCAD details and specifications for the vapor barriers, subgrade rock and potential sub-slab piping. The details will show methods of installation, sealing penetrations, control joint details, and material specifications. The drawings will be stamped by a professional engineer registered in Kentucky.

This proposal assumes the foundation contractor and plumbing contractor can install the subsurface systems with minimal training.

### ***Task 4 – Inspection of Installed Vapor Barrier***

Inspections of the vapor barrier can be done after the foundation contractor has installed the formwork and steel reinforcing but prior to the placement of concrete. Each inspection takes about an hour on-site. LFI anticipates the concrete can be completed in 2 separate pours of the slab. 24 hours' notice is required prior to the scheduled site visit.

The standard for inspection will be adherence to the design documents created by LFI and previously submitted.

**Task 5 – Verbal and Written Report on Inspection**

LFI will provide the site superintendent with a verbal report on the adequacy of the installed vapor barrier. Repairs or any additional work prior to the concrete pour will be pointed out on-site. The details of the verbal report will be documented via an e-mail to the contractor and the project architect.

**Task 6– Meetings**

LFI assumes meetings to discuss the details with the foundation and plumbing contractors, the owner, KDEP, and the architect may be required as part of the project.

**COST**

LFI will complete the proposed scope of services on a time and materials, not-to-exceed (NTE) basis in accordance with the attached fee schedule. Our *estimated* costs per task are as follows:

- Task 1 - Review of Proposed Foundations \$ 500
- Task 2: - System Design \$ 1,000
- Task 3 - Construction Specifications \$ 2,700
- Task 4 - Inspection of Installed Vapor Barrier (2 visits) \$ 1,500
- Task 5 - Verbal and Written Report on Inspection \$ 400
- Task 6 - Meetings \$ 2,400

**TOTAL** \$ 8,500

If additional effort is necessary to address unanticipated requests from the architect or the KDWM, or work that is outside the scope described in this proposal, LFI will seek your authorization prior to proceeding with the additional tasks.

**SCHEDULE**

LFI anticipates that completion of the design services will take approximately two to three weeks, following receipt of all requested data from LFI anticipates that completion of an inspection can be within 8 hours of a verbal inspection request. The inspections can likely be done in less time if the inspector is provided 24 hours prior notice.

**AUTHORIZATION**

If Kenton County is in agreement with the scope of work set forth in this proposal and the attached standard terms and conditions, please sign in the space below and return one copy to us as your authorization to proceed.

We appreciate the opportunity to provide you with this proposal and look forward to working with you on this project. Please feel free to contact us if you have any questions or comments regarding this information.

Sincerely,



William P Harshaw, PE  
Senior Engineer  
Kentucky PE # 17512



R. William Johnston, PG  
Principal Geologist  
Kentucky PG # 113058

Attachment: Terms and Conditions and Fee Schedule

**Accepted by:**

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



## TERMS AND CONDITIONS

**DEFINITIONS.** When used herein, the terms "we", "us" "Linebach Funkhouser, Inc." or "our" refer to Linebach Funkhouser, Inc., and the terms "you", "your", "he", "his", "it" and "its" refer to Client.

**SCOPE OF WORK.** Client has requested that Linebach Funkhouser, Inc. perform the Work as specified in and for the charges set forth in our Proposal' (incorporated by reference in its entirety herein) and as authorized by Client's representative.

**COMPENSATION.** Invoices for services provided are due and payable upon receipt. Balances outstanding more than thirty (30) days after invoice date shall be deemed delinquent and shall be subject to a monthly finance charge of 1 1/2 percent, court costs, attorney's fees and any other cost of collection incurred by Linebach Funkhouser, Inc.

**RIGHT OF ENTRY AND RIGHT TO PROCEED.** Client grants a right of entry from time to time to Linebach Funkhouser, Inc., its agents, staff, consultants, and contractors or subcontractors, for the purpose of performing and with the right to perform all acts, studies, and research including without limitation, the making of tests and evaluations, pursuant to the Work. Client represents that it possesses all permits and licenses required to comply fully with all laws, ordinances and regulations governing the performance of its activities at the site. To the extent that any of the Work requires access to property owned or controlled by a third party, Client represents that it has obtained all licenses, permits, and rights-of-way necessary to grant Linebach Funkhouser, Inc. access to such property.

**STANDARD OF CARE.** Linebach Funkhouser, Inc. will perform its services using that degree of skill and care ordinarily exercised under similar conditions by reputable members of Linebach Funkhouser, Inc.'s profession practicing in the same or similar locality at the time the services are performed. NO OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE OR INTENDED.

**INSURANCE.** Linebach Funkhouser, Inc. maintains workers' compensation and employer's liability insurance for our employees as required by state laws. In addition, we maintain comprehensive general liability and auto liability insurance. A Certificate of insurance can be supplied evidencing such coverage. We will not be liable or responsible for any loss, damage, or liability beyond the amounts, limits, coverage, or conditions of such insurance specified above.

**PROFESSIONAL LIABILITY.** Client acknowledges and agrees that our total aggregate liability to Client or any third party arising from negligent professional acts, errors, omissions or breach of the above described standard of care and warranty, shall not exceed the amounts, limits, coverage or conditions of our professional liability insurance.

**HAZARDOUS SUBSTANCES AND CONSTITUENTS.** Client shall advise us upon execution of this Agreement of any hazardous substances or any condition existing in, on, or near the site presenting a potential danger to human health, the environment, or equipment. Client shall provide continuing information as it comes available to the attention of Client in the future. By virtue of entering into this Agreement or of performing the Work hereunder, we do not assume control of or responsibility for the site or the person in charge of the site or for communicating with any federal, state or local public agencies regarding the Work or the site or undertake responsibility for reporting to any federal, state or local public agencies any conditions at the site that may present a potential danger to public health, safety or the environment, including but not limited to spills, releases, or leaks. Client shall bear the sole responsibility for communicating with any federal, state or local public agencies regarding the Work or the site, and for notifying the appropriate federal, state or local public agencies as required by law, or otherwise to disclose, in a timely manner, any information that may be necessary to present any danger to health, safety, or the environment, including but not limited to spills, releases and leaks. Client shall indemnify and hold us harmless for the consequences of any communication or reporting by us or by Client to any such public agency. Client shall have sole responsibility for compliance with any and all federal, state or local laws, regulations, guidance or other requirements relating to the handling, treatment, storage or disposal of hazardous substances or constituents, and shall have sole responsibility for any and all changed conditions at, or hazardous substances or constituents introduced to the site by Client or any third party before, during or after the completion of the Work described herein. Client shall have sole responsibility for compliance with all applicable laws relating to the handling, removal, transportation, treatment, storage or disposal of hazardous substances or constituents from, to or at the site, and shall indemnify and hold harmless Linebach Funkhouser, Inc. for any and all liability arising from such action, including but not limited to any allegation that Linebach Funkhouser, Inc. is an owner, handler, generator, operator, treater, storer, transporter, or disposer under the Resource Conservation and Recovery Act of 1976 as amended, the Comprehensive Environmental Response, Compensation, and Liability Act as amended, or any other similar federal, state or local regulation or law.

**UNFORESEEN OCCURRENCES.** If, during the performance of the Work, any unforeseen hazardous substances or constituents or other unforeseen conditions or occurrences are encountered which, in our sole discretion affect or may affect the Work, the risk involved in performing the Work, or the recommended scope of the Work, we will promptly notify Client thereof. Subsequent to that notification, Linebach Funkhouser, Inc. in its sole discretion may:

- (a) If practicable, complete the original Scope of Services in accordance with the procedures originally intended in the Proposal:
- (b) Agree with Client to modify the Scope of Services and the estimate of charges to include work on the previously unforeseen conditions or occurrences:
- (c) Terminate the Work as provided herein effective on the date specified by us.

**CLAIMS.** In the event any third party or employee of Client brings suit or claim for damages against us alleging exposure to or damage from material, elements or constituents at or from Client's facility before, during, or after the Work performed under this Agreement, which is alleged to have resulted in or caused disease or any adverse health condition or resulting in cost for remedial action, uninhabitability of property, or other personal injury or property damage, then: Client shall be liable for, hold harmless and indemnify us in any such suit or claim of any kind or of any nature whatsoever and pay on our behalf, to the maximum extent permitted by law, any and all damages, losses, liabilities, obligations, penalties, claims, judgments, costs, disbursements or expenses, including but not limited to attorneys' and experts' fees and other costs, expenses or disbursements, and personnel costs incurred by us as a result of such suit or claim, including any interest thereon. In the event that Client makes a claim against us of any kind or nature whatsoever for any alleged error, omission, or act arising out of the performance of the Work that cannot be mutually resolved without resort to litigation, and Client fails to prove such claim, then Client shall pay all costs incurred by us in defending ourselves against the claim, including, but not limited to attorneys' and experts' fees and other costs, expenses or disbursements, and personnel costs incurred by us as a result of such claim, including any interest thereon. Client agrees that for the purposes of this Agreement it has failed to prove its claim when the monetary amount awarded to or recovered by it is less than the highest sum offered by us in writing to resolve the matter prior to resolution of the claim.

**DOCUMENTS.** Client will furnish or cause to be furnished such reports, data, studies, plans, specifications, documents and other information deemed necessary by us for proper performance of our services and Client warrants and represents that any such information provided shall not infringe on any United States or foreign patent, copyright, trade secret or other proprietary right of any third party, and shall hold Linebach Funkhouser, Inc. harmless and indemnify us for any such infringement. We may rely upon Client-provided documents in performing the services required under this Agreement; however, we assume no responsibility or liability for their accuracy. Client-provided documents will remain property of Client. All documents, including, but not limited to drawings, specifications, reports, boring logs, field notes, laboratory test data, calculations and estimates, prepared by us as instruments of service pursuant to this Agreement, shall be our sole property. Client agrees and acknowledges that all documents of any nature furnished to Client or Client's agents or designees by Linebach Funkhouser, Inc. shall be treated as confidential, and shall be disseminated only to those employees or agents whose duties justify their need to know such information, unless prior written authorization is obtained from Linebach Funkhouser, Inc. or disclosure is compelled by a court of competent jurisdiction. Client further agrees that any documents not paid for will be returned to us upon demand and will not be used by Client for any purpose whatsoever. Client further agrees that under no circumstances shall any documents produced by us pursuant to this Agreement be used at any location, for any project or by any person not expressly provided for in this Agreement without our prior written permission. If Client uses all or any of our documents for another project or disseminates our documents in violation of this paragraph, client shall to the maximum extent permitted by law indemnify and hold us harmless from any all claims arising from such unauthorized use. Further, no part of any document we deliver to Client shall be reproduced or distributed, whether for advertising or any other purpose, without our prior written consent. Any such reproduction or distribution shall be at Client's sole risk and without liability or legal exposure to Linebach Funkhouser, Inc., and Client shall indemnify and hold us harmless, to the maximum extent permitted by law, from any and all claims arising from such unauthorized reproduction or distribution.

**TERMINATION.** This Agreement may be terminated by either party for any reason upon 10 days' written notice. Upon termination of this Agreement, Linebach Funkhouser, Inc. shall be entitled to payment for Work performed up to and including the date the notice of termination is received as well as all reasonable costs of demobilization and closeout of the Work.

**DUTY TO COOPERATE.** The parties agree to provide reasonable access to information regarding the site or the Work performed and to responsible personnel as may be required to address any claim made regarding the Work performed or this Agreements. The parties further agree to provide copies to each other of any claims, demands or notices from any federal, state or local public agency regarding the Work performed or this Agreement.

**SEVERABILITY.** In the event that any provision herein shall be deemed invalid or unenforceable, the other provisions hereof shall remain in full force and effect, and binding upon the parties hereto.

**SURVIVAL.** All obligations arising prior to the termination of this Agreement and all provisions of this Agreement allocating responsibility or liability between Client and Linebach Funkhouser, Inc. shall survive the completion of the services and the termination of this Agreement.

**INTEGRATION.** This Agreement and the documents attached hereto and which are incorporated herein constitute the entire Agreement between the parties and cannot be changed except by written instrument signed by both the parties.

**GOVERNING LAW, VENUE AND JURISDICTION.** This Agreement is and shall be deemed to be a contract entered into and made pursuant to the laws of the State of Kentucky and shall in all respects be governed, construed, applied and enforced in accordance with the laws of such State.

## 2024 FEE SCHEDULE

### A. Professionals

➤ Field Geologist, Scientist, Engineer, per hour	\$90
➤ Staff Geologist, Scientist, Engineer, per hour	\$110
➤ Project Geologist, Scientist, Engineer, per hour	\$120
➤ Senior Geologist, Scientist, Engineer, per hour	\$140
➤ Principal Geologist, Scientist, Engineer, per hour	\$170

### B. Support Personnel

➤ Word Processor/Administrative Assistant, per hour	\$60
➤ Drafting, per hour	\$90

### C. Subcontractors

➤ Drilling, Laboratory, Etc.	Cost + 20%
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### D. Travel Expenses

➤ Vehicle Rental, Overnight, Meals, Etc.	Cost + 20%
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### E. Other Expenses

➤ Overnight Courier (Fed Ex, UPS)	Cost + 20%
➤ General Administrative Expenses (Copies, Office Phone, Fax) - Report production expenses requiring excessive documentation or report copies (more than 2), or outside printing/copying services, will be passed along at Cost + 15%	No Charge

### F. Equipment

➤ Disposable Bailers, each	\$20.00
➤ Photo-Ionization Detector, per day	\$95.00
➤ Water Level Indicator, per day	\$30.00
➤ Interface Probe, per day	\$65.00
➤ Peristaltic Pump, per day	\$50.00
➤ Survey Equipment, per day	\$65.00
➤ Hand Auger, per day	\$35.00
➤ Hammer Drill, per day	\$30.00
➤ Drone, per day	\$150.00