

March 14, 2025

Marlen Salazar, Engineer Trainee New York State Department of Environmental Conservation 47-40 21st Street Long Island City, New York 11101 via e-

via e-mail: marlen.salazar@dec.ny.gov

 Re: Corrective Measures Work Plan for the Parkview Commons Brownfield Cleanup Site located at 871 Elton Avenue, Borough of Bronx, New York
 NYSDEC BCP Site: C203014
 GBTS Project Numbers: 21003-0155 | LB03027

Dear Ms. Salazar:

This Corrective Measures Work Plan (CMWP) was prepared by Gallagher Bassett Technical Services (GBTS) and was certified by Daniel Bellucci, P.E. of Bellucci Engineering, PLLC, a registered New York State Professional Engineer (P.E. 099470) on behalf of BX Parkview Associates LLC for the Parkview Commons Site located at 871 Elton Avenue, Bronx, New York. Bellucci Engineering, PLLC, directly contracted with BX Parkview Associates LLC. The Site was remediated through the New York State (NYS) Brownfield Cleanup Program (BCP) and is subject to yearly inspection and reporting requirements, which are documented in an approved NYS Department of Environmental Conservation (DEC) Site Management Plan (SMP), dated September 2006 (last revised September 2016).

During the annual Periodic Review Process, deficiencies were identified by GBTS with one of the Engineering Controls (ECs) at the Site. Specifically, one of the sub-slab depressurization (SSD) system fans was not working and the alarm systems intended to alert on-site personnel of system failures were not operational. In addition, regular inspection records have not been maintained and were not provided. Several components of the SSD systems are in poor condition and should be replaced.

This CMWP was prepared to address necessary repairs and overdue maintenance to the engineering controls as well as necessary improvements to the inspection and reporting requirements to ensure the Site is in compliance with the approved SMP.

SITE DESCRIPTION

The Site is an irregularly shaped 0.67-acre parcel with frontage on the northern side of East 160th Street, southern side of East 161st Street, and western side of Elton Avenue. The Site is currently developed with a nine-story mixed-use building with office space and community rooms at the first floor and residential units on the upper floors. The building is approximately U-shaped and contains three main wings, with the northern wing having a west-east axis, the central wing having

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a north-south axis, and the southern wing having an east-west axis. Each wing is serviced by three independent SSD systems.

Prior to redevelopment between 2004 – 2005 the Site contained a vacant building at the northern portion of the Site that was most recently used as a gasoline station and automotive repair facility (circa 1951-2004). The remainder of the property was a vacant, paved parking lot.

CORRECTIVE MEASURES

Blower Unit Replacements

During the annual Site-wide inspection, GBTS identified that the blower associated with the VP-3 system (servicing the southern wing) was offline. Electrical power to this blower was reset at the breaker box in the electrical room, however, the blower did not power back on after resetting the breaker. The blower has likely reached the end of its life and will be replaced with a new comparable blower unit.

The electrical connections servicing blower units VP-1 and VP-2 are in poor condition and he VP-1 and VP-2 blower units are the originally installed fans which are approaching 20 years of service. As a proactive measure, the blowers and the electrical connections will be replaced to ensure continued operation of the SSD systems. Based on manometer readings from the vapor extraction monitoring point (VEMP) for the VP-1 system (VEMP-1R), the monitoring point may be clogged or the blower unit is not providing adequate vacuum to this portion of the building. It is recommended that an Obar GBR 89 blower be installed at the VP-1 discharge point. The Obar GBR89 is capable of creating both higher vacuum and air flow than the current blower and will allow for more airflow and vacuum in the VP-1 system, if needed. The blower units servicing the VP-2 and VP-3 systems have been discontinued by the manufacturer and will be replaced with comparable blowers (Obar GBR76 SOE) or similar units, as determined by the PE. All new blowers will include potentiometer dials, slowing for control of system air flow. The new blowers will be installed following manufacturer specifications by a licensed electrician in accordance with applicable codes and regulations. The selected blower units will have integrated condensate bypasses or condensate bypass kits will be installed as per manufacturer recommendations.

The blower units and discharge point piping will be securely mounted to the nearest wall and the discharge point piping will be extended vertically to meet applicable NYC Building Code clearance requirements away from operable windows, doors and active or passive air intakes. The VP-1 and VP-2 blowers or system piping will be mounted directly onto the bulkhead wall; the VP-3 discharge point will be supported with vertical guy wires or will be routed towards the bulkhead of the 4th floor roof to allow piping to be mounted directly onto the bulkhead wall.

Visual Gauge Replacement and Audible Alarm Installation

The u-manometer servicing the VP-3 sub-system did not contain any fluid. The SSD systems do not contain audible alarms to alert on-site personnel of blower failures. Combination visual gauge and audible alarm units (Obar GBR 25) will be installed at each riser. The GBR 25 is a combination visual gauge that provides a digital readout of the vacuum within the risers, as well as an audible

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alarm that will trigger both a red-light indicator and an audible noise indicator upon detecting a drop in vacuum within the riser. Installation of these combination units at each riser will allow continued monitoring of the blower units and alert on-site personnel of blower failures. The alarm will be preset to trigger if vacuum drops below -0.5 inches of water column (IWC) The preset alarm value may be modified as needed based on startup testing readings. The GBR 25 combination units will be installed at the VP-1 and VP-2 risers on the first floor by securing them to a wall immediately next to the risers. In order to install the GBR 25 unit on the VP-3 riser, an access panel will be installed at a lower floor and the alarm will be mounted within the access panel.

Monitoring Point Repair/Replacement

One of the four permanent vapor extraction monitoring points (VEMPs) is not operational and must be repaired or replaced. Monitoring point VEMP-1R, which is located at the western end of the northern wing, may be clogged. The monitoring point, a Vapor Pin device, did not contain a protective cap or flush-mounted cover and was found unprotected on the day of the inspection. The fan servicing the north wing was verified to be operational and manometer readings at VEMP-1R have previously been recorded to be -0.008 IWC, suggesting the monitoring point is likely obstructed, or the blower unit may not be providing adequate vacuum.

To clear potential obstructions, compressed air will be blown directly into the inlet to dislodge dust or debris. If no readings are recorded on the micro-manometer following attempts to unclog the device, the Vapor Pin will be removed and a new Vapor Pin will be installed in the same hole, following manufacturer specifications. If there continue to be no readings (or inadequate readings) after replacing the Vapor Pin, the new blower unit's speed will be adjusted until acceptable vacuum levels are recorded at the monitoring point.

A reading of 0.000 IWC was recorded at VEMP-4; however, the blower unit that provides depressurization for this section of the building was offline. Once the blower unit is replaced, vacuum readings will be collected from VEMP-4 using a digital micro-manometer capable of reading 0.001 IWC in order to verify that the monitoring point is functional and the fan is providing adequate vacuum.

The SMP specifies a target sub-slab vacuum value of -0.020 IWC. As per discussions with the NYSDEC, the target value will be revised to -0.004 IWC and a revised SMP will be provided to reflect this updated target value.

Post Corrective-Measures Testing

Following the replacement of the blower units, installation of combination visual alarm and audible gauges, and repairing/replacing VEMPs, a complete round of SSDS testing will be conducted. The testing will include collection of sub-slab vacuum readings from the VEMPs, recording system vacuum readings from the visual gauges, and confirming proper functioning of the audible alarms. Additional testing parameters may be collected at the discretion of the P.E. of record.



VES Monitoring and Inspection Records

According to the SMP, Site personnel should be performing inspections of accessible components of the VES every two weeks and filling out the U-manometer Reading Log sheet. According to the current Building Superintendent, who as of September 2024 has only been employed for approximately 6 months, former Site personnel did not leave any log sheets and did not provide training for maintaining and monitoring the VES.

A new U-manometer Reading Log Sheet was provided to the Building Superintendent and training was provided by GBTS on how to fill out the Log Sheet and what maintenance and monitoring protocols to follow in order to ensure the VES remains operational and the Site in compliance with the requirements of the SMP. Copies of the completed Log Sheet will be shared with the environmental consulting team on a bi-weekly basis to ensure the inspections are occurring in a timely manner in compliance with the SMP.

SCHEDULE

The proposed corrective measures will be implemented within approximately one month following approval of this CMWP by the NYSDEC. Once this CMWP scope is fully implemented, the work performed and results from testing the SSDS will be incorporated into the periodic review report (PRR), which will cover the reporting period from January 3, 2023 through the date when the SSDS is reactivated. If the CMWP is implemented in April 2025, the PRR will be finalized and submitted by May 30, 2025.

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CERTIFICATION

I, Daniel Bellucci, P.E., certify that I am currently a NYS registered professional engineer and that this Corrective Measures Work Plan was prepared in accordance with all applicable statues and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

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Professional Engineer: Daniel Bellucci, P.E.
New York License Number: 099470
Engineering Firm: Bellucci Engineering, PLLC
Date: March 14, 2025

Warning: It is a violation of Article 145 of New York State Education Law for any person to alter this document in any way without the express written verification of adoption by any New York State licensed engineer in accordance with Section 7209(2), Article 145, New York State Education Law.

Please call Erick Salazar at (845) 867-4716 or Daniel Bellucci at (845) 803-4347 should you have any questions or comments. We appreciate the opportunity to provide this service to you and look forward to working with you in the future.

Sincerely,

Erick Salazar Project Manager Gallagher Bassett Technical Services

Richard Hooker Manager – Environmental Consulting Gallagher Bassett Technical Services

Attachments: Fieldwork Map Contract between BE/Parkview Blower Unit Specifications Visual Gauge/Audible Alarm Unit Specifications





February 11, 2025

Mr. Matt Engel BX Parkview Associates LLC c/o Langsam Property Services 1601 Bronxdale Avenue Bronx, NY 10462

RE: Professional Engineering Services Corrective Measures Work Plan, SSDS- As-Built Drawings, Site Management Plan and Periodic Review Report Review & Certifications Parkview Commons Development Site 421-435 East 160th Street, 426-440 East 161st Street & 865-877 Elton Avenue Borough of Bronx, New York BCP Site #: C203014

Dear Mr. Engel:

Bellucci Engineering, PLLC appreciates the opportunity to provide professional engineering services at the above-referenced property (herein the Site). The scope of our services includes review and certification of the Corrective Measures Work Plan (CMWP), Sub-Slab Depressurization System (SSDS)- As-Built Drawings, a Revised Site Management Plan (SMP) and Periodic Review Report (PRR). As the certifying Professional Engineer-of-Record, Bellucci Engineering's scope of services for implementation of this project will include the following:

Task 1 – Corrective Measures Work Plan Review & Certification

A CMWP has been prepared and submitted to the NYSDEC and NYSDOH for review. Comments have been received and are pending. Bellucci Engineering will perform a final review and certification of the CMWP as the P.E. of record.

Task 2 – Site Inspection & Geophysical Survey for Sub-Slab Depressurization System

The NYSDEC has requested as-built drawings be prepared and certified by a registered professional engineer for the existing SSDS at the Site. While some historical data exists regarding the design and layout of the SSDS, additional investigation was required to properly map and identify the SSDS components in an effort to prepare accurate as-built drawings. An independent geophysical survey contractor was retained to perform a sub-slab investigation in an attempt to map sub-grade piping features. This investigation employed ground penetrating radar (GPR) and electromagnetic tracing techniques in an attempt to locate subgrade SSDS pipes. The findings of the investigation will be combined with historic data available to produce the as-built drawings for the SSDS.

Task 3 – SSDS As-Built Preparation & Certification

Bellucci Engineering and Gallagher Bassett Technical Services (GBTS) will prepare SSDS as-built drawings to be incorporated into a revised SMP. The SSDS as-builts will be stamped/ certified by a NYS registered professional engineer of record.

Task 4 – Revised Site Management Plan Review & Certification

Bellucci Engineering and GBTS will revise the existing SMP to include the as- built drawings for the SSDS. A description and update for the corrective measures to be implemented at the Site will also be captured

Parkview Commons Development Site BCP Site #: C203014

in the revised SMP. The revised SMP will be reviewed and stamped/ certified by a NYS registered professional engineer of record.

Task 5 – Periodic Review Report Review & Certification

The Periodic Review for calendar year 2023 will be revised based on the Corrective Measures to be implemented at the Site. The PRR will be reviewed and stamped/ certified by a NYS registered professional engineer of record.

Task 6 – Miscellaneous Professional Engineer Project Management Time

Bellucci Engineering, PLLC anticipates up to 5 hours of Professional Engineer project management time outside of the scope of services described in other tasks above may be required. Project Management time will be billed on a time and material basis at a rate of \$200/ hour. Bellucci Engineering, PLLC will notify the Client if Project Management time is anticipated to exceed 5 total hours.

Project Schedule

Bellucci Engineering PLLC is prepared to begin working on the project immediately. Receipt of this proposal signed by an authorized agent indicates the Client's approval for the scope of services and the fee schedule listed below.

Fee Schedule

The six tasks associated with the engineering scope of services have been broken down in the table below. Task #'s 1 through 5 are fixed fee and Task # 6 will be billed on a time and materials basis. The Client will be notified if additional Project Management time beyond the estimated 5 hours allocated in the table below is required. Each task will be billed at the time of completion.

Task	Billing Type	Billing Rate	Total Fee
Task #1 – Corrective Measures Work	Fixed Fee	~	BILLED UNDER
Plan Review & Certification			PRIOR CONTRACT
Task #2 – Site Inspection &	Fixed Fee	~	BILLED UNDER
Geophysical Survey for Sub-Slab			PRIOR CONTRACT
Depressurization System			
Task #3 – SSDS As-Built Drawing	Fixed Fee	REDACTE	D
Preparation & Certification			
Task #4 – Revised Site Management	Fixed Fee		
Plan Review & Certification			
Task #5 – Periodic Review Report	Fixed Fee		
Review & Certification			
Task #6 – Miscellaneous Professional	Time &		
Engineer Project Time @ 5 hours	Materials		
TOTAL ESTIMATED BUDGET		1	

Net payment terms are due 30 days from receipt of invoice. Payment is the sole responsibility of the Client and is not contingent upon third party funding, transactional closing, or insurance recovery.

Parkview Commons Development Site BCP Site #: C203014

Contract Authorization

Bellucci Engineering, PLLC is prepared to commence work immediately upon receipt of this signed proposal. Issuance of a purchase order and/or signature of this proposal acknowledges acceptance of Bellucci Engineering's proposal, cost, schedule and assumptions. Authorization of this proposal by the Client or an authorized agent indicates said agent has full authority to execute this agreement. This proposal will remain firm for a period of 90 days.

Thank you kindly for your consideration of Bellucci Engineering, PLLC for this project. Please feel free to contact Daniel Bellucci with any questions.

Sincerely,

Sail Belleri

Daniel Bellucci, P.E. **Environmental Engineer**

Accepted By:

Mr. Matt Engel BX Parkview Associates LLC c/o Langsam Property Services 1601 Bronxdale Avenue Bronx, NY 10462

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Attachments: Standard Terms & Conditions

Attachment A

STANDARD TERMS AND CONDITIONS

The Client and Bellucci Engineering, PLLC (hereinafter "BE") hereby agree as follows:

- 1. CONTRACT- The Contract is the Proposal or Contract document that is signed and dated by BE and the Client including these Standard Terms and Conditions, which are appended and incorporated by reference. The Client is defined as the entity that signs the Proposal or Contract.
- 2. SPECIAL TERMS AND CONDITIONS These "Standard Terms and Conditions" are an integral part of the Proposal and Contract and shall remain in effect during and after the completion or termination of BE's services, and shall control all conflicting terms or conditions unless BE agrees otherwise in writing. BE retains the right to attach this Proposal and Contract to any of its service reports or assessments provided to Client, as an exhibit, and Client agrees that this Proposal and Contract is considered a part of the Draft or Final report or assessment.
- 3. COMPENSATION FOR SERVICES AND PAYMENT TERMS The Client agrees to pay BE in accordance with the payment terms provided in the Contract. Invoices will be submitted upon initiation of work on the project, monthly and/or upon completion of a specified scope of service. Invoices are due and payable upon receipt. If payments are not made as agreed, the Client agrees to pay reasonable collection costs and a handling charge of one and one-half percent (1 1/2%) per month. Any subconsultant's work will be invoiced at cost plus 15%.
- 4. RIGHT OF ENTRY- The Client agrees to furnish BE with the right-of-entry on the land and into any structures or represents and warrants, if the site is not owned by the Client, that permission has been granted to make site reconnaissance and observations pursuant to the scope of services in the Contract. Client will make reasonable efforts to secure permission (and any permits) necessary to allow BE free access to the subject property. BE will take reasonable precautions to minimize damage to the land and structures from activities related to its services but has not included in the fee the cost for restoration of damage that may result from BE's operations, unless specifically stated in the Contract.
- 5. UNDERGROUND STRUCTURES Unless otherwise agreed, the Client shall provide BE with locations of buried utilities and other underground structures in areas of subsurface exploration. BE will take reasonable precautions to avoid damage to the buried utilities and other underground structures noted. If locations are not known or cannot be confirmed by the Client, then there will be a degree of risk to the Client associated with conducting the exploration. In the absence of confirmed underground structure locations, the Client agrees to accept the risk of any damages and losses resulting from the exploration work.
- 6. RECOGNITION OF RISK BE will endeavor to perform services under this agreement in a manner consistent with that level of care and skill ordinarily exercised by other professional consultants performing such services within the same limits prescribed by the Client or set forth in the Proposal, at the same time performed by engineers in the same locality as the project site, and under the same or similar circumstances and conditions (the "Required Standard of Care"). Client recognizes that environmental, geologic, and geotechnical conditions can vary from those encountered at the times when and locations where data are obtained, and that such limitation on available data results in some level of uncertainty with respect to the interpretation of these conditions, despite meeting the Required Standard of Care.
 - a. CHEMICAL WASTES AND HAZARDOUS WASTES Client recognizes that commonly used exploration methods (such as drilling borings, pushing or driving probes, or excavating trenches) involve an inherent risk. These exploration methods may penetrate through a stratigraphic unit (either naturally occurring or man-made) bearing Hazardous Materials (herein defined) and serve as a connecting passageway between such stratigraphic unit and an uncontaminated stratigraphic unit or groundwater, thus potentially inducing cross-contamination. However, Client recognizes

that there is an inherent risk in drilling borings, pushing or driving probes, excavating trenches, or implementing other methods of exploration at or near a site contaminated by Hazardous Materials. Further, Client recognizes that these are not the only risks that may be encountered but are simply examples of consequences that cannot be anticipated or avoided in many cases, even through the exercise of the Required Standard of Care. Client accepts these and all similar risks and releases BE from any and all liability that may be incurred as a result of the services provided by BE, provided that such services were performed in accordance with the Required Standard of Care.

- b. SUBSURFACE RISKS Client recognizes that special risks occur whenever engineering or related disciplines are applied to identify subsurface conditions. Even a comprehensive sampling and testing program, implemented with appropriate equipment and experience by personnel under the direction of a trained professional who functions in accordance with the Required Standard of Care may fail to detect certain hidden conditions. For similar reasons, actual environmental, geological, and technical conditions that BE properly inferred to exist between sampling points may differ significantly from those that actually exist. The passage of time also must be considered, and the Client recognizes that due to natural occurrences or direct or indirect human intervention at the Site or distance from it, actual conditions may quickly change. The Client realizes that nothing can be done to eliminate these risks altogether and that the Services included in this Agreement are those which the Client agreed to or selected in light of his/her own risk preferences and other considerations.
- c. STATE-OF-THE-PRACTICE Client recognizes that the state-of-the-practice, particularly with respect to removal and remediation of Hazardous Materials from contaminated sites and the regulatory determination of and threshold limits for Hazardous Materials, is changing and evolving. While BE must perform in accordance with the Required Standard of Care, it is recognized that standards will subsequently change because of improvements in the state-of-the-practice. Nevertheless, BE shall not be liable based upon such changed standards, but only upon the Required Standard of Care applicable when the Services are performed.
- 7. DOCUMENTS All reports, design drawings, field data and notes, laboratory test data, calculations, estimates, and other documents that BE prepares as instruments of service as part of this Agreement shall remain BE's property. The Client agrees that BE's services are on behalf of and for the exclusive use of the Client and that all reports and other documents furnished to the Client or its agents shall be utilized solely for this project. Client shall indemnify and hold harmless BE, its officers, directors, employees and subconsultants (collectively, BE) against any damages, liabilities, including reasonable attorneys' fees and defense costs, arising from or alleging arising from or in any way connected with the unauthorized use of BE's documents of service from or through the client without the written authorization of BE. BE will retain pertinent records relating to the services performed for a period of one (1) year following submission of our report or other documents.
- DISPOSAL OF SAMPLE Soil, rock, water, and/ or other samples obtained from the subject property are the property of the Client. BE shall discard the samples 60 days after BE's report has been submitted, unless other arrangements are provided in the Contract. Should any of these samples be found to be contaminated by hazardous substances or suspected hazardous substances, it is the Client's responsibility to arrange and pay for lawful disposal. In the event that samples collected by BE or provided by Client or wastes generated as a result of project site investigation activities contain or potentially contain substances or constituents which are or may be hazardous or detrimental to health, safety, or the environment as defined by federal, state, or local statutes, regulations, or ordinances, including but not limited to samples or wastes containing Hazardous Materials, said samples or wastes remain the property of the Client and the Client shall have responsibility for them as generator. If set forth in the Proposal, BE will, after completion of testing and at Client's expense, either (1) return said samples and waste to Client, or (2) using a manifest signed by Client as generator, have said samples and/or wastes transported to a location selected by Client for disposal. Client agrees to pay directly all costs associated with the storage, transport, and disposal of said samples and/or wastes. Unless otherwise agreed upon in the applicable Proposal, BE shall not transport, handle, store or dispose of waste or samples or arrange or subcontract for waste or sample transport, handling, storage, or disposal. Client recognizes and agrees that BE is working as a bailee and at no time assumes title to said waste or samples or any responsibility as generator of said waste or samples.

- 9. RENEGOTIATION OF CONTRACT FOR PRESENCE OF HAZARDOUS MATERIALS If the scope of services for this Contract does not include services relating to hazardous waste, oil, asbestos or other hazardous materials, as defined by federal, state and/ or local laws or regulations, and if such materials are discovered during BE's work, the Client agrees to negotiate appropriate revisions to the scope of services, the budget estimate, and the terms and conditions of the Contract. When such hazardous materials are suspected, BE will have the option to stop work until a new agreement is reached. If a mutually satisfactory agreement cannot be reached between both parties, the Contract shall be terminated. The Client agrees to pay BE for all services rendered, including any costs associated with termination.
- 10. CONSTRUCTION SERVICES If BE's construction observations services are included as part of the scope of services in the Contract, BE will provide personnel to observe construction to ascertain that it is being performed, in general, in accordance with the plans and specifications. BE cannot provide its opinion on the suitability of any part of the work performed unless measurements and observations of that part of the construction are made by BE personnel. BE's services do not make BE a guarantor of the contractor's work, and the contractor will continue to be responsible for the accuracy and adequacy of all construction or other activities performed by the contractor. The contractor will be solely responsible for the methods of construction; supervision of personnel and construction; control, of machinery; false work, scaffolding, or other temporary construction aids; safety in, on, or about the job site; and compliance with OSHA regulations. In consideration of BE's performance of its obligations to review and evaluate the various bidders and bid submissions and to make recommendations to the Client regarding the award of the construction contract, the Client agrees to hold harmless and indemnify BE for all costs, expenses, damages, and attorneys' fees which are incurred by BE as a result of any claims, allegations, administrative or court proceedings, arising out of or relating to any bid protest or such other action taken by any person or entity with respect to the review and evaluation of bidders and bid submissions and/ or recommendations concerning the award of the construction contract. Although this paragraph shall not apply in circumstances in which BE is finally adjudicated by a court to have actually engaged in intentional and willful conduct without any legitimate justification, privilege or immunity, the Client shall be obligated to indemnify BE for all such indemnification obligations incurred by BE until any such final adjudication has been made by a court of competent jurisdiction.
- 11. STANDARD OF CARE BE's services will be performed in accordance with generally accepted practices of the members of the same profession providing similar services at the same time, in the same locale, and under like circumstances. BE makes no other representations or warranties, whether express or implied, with respect to the services rendered hereunder.
- 12. INFORMATION Client will use reasonable efforts to provide to BE information in Client's possession that BE deems necessary to BE's completion of the services.
- 13. ASSESSMENT PROCESS Client understands and agrees that the information reported will be obtained through sources deemed reliable, a visual site survey of areas readily observable, easily accessible or made accessible by the property contact and interviews with owners, agents, occupants, or other appropriate persons involved with the Subject Property. Municipal information will be obtained through file reviews of reasonably ascertainable standard government record sources, and interviews with the authorities having jurisdiction over the property. Findings, conclusions and recommendations included in the report will be based on our visual observations in the field, the municipal information reasonably obtained, information provided by the Client, by agents of the site owner, and/or a review of readily available and supplied drawings and documents. No disassembly of systems or building components or physical or invasive testing will be performed. BE will render no opinion as to the site or property condition at un-surveyed and/or inaccessible portions of the site or property. BE will rely completely on the information, whether written, graphic or verbal, provided by the property contact or as shown on any documents reviewed or received from the property contact, owner or agent, or municipal source, and assumes that information to be true and correct. The observations in the report will be valid on the date of the survey. The report will speak only as of its date, in the absence of a specific written update of the report, signed and delivered by BE.
- 14. DISPUTE RESOLUTION Prior to the initiation of any legal proceedings, the parties to this Agreement agree to submit all claims, disputes or controversies arising out of or in relation to the interpretation, application or enforcement of this Agreement to non-binding mediation. Such mediation shall be conducted

under the auspices of the American Arbitration Association or such other mediation service or mediator upon which the parties agree. The Party seeking to initiate mediation shall do so by submitting a formal, written request to the other party to this Agreement. This section shall survive completion or termination of this Agreement, but under no circumstances shall either party call for mediation of any claim or dispute arising out of this Agreement after such period of time as would normally bar the initiation of legal proceedings to litigate such claim or dispute under the laws of the State of New York.

- 15. INSURANCE To the extent BE is protected by Worker's Compensation Insurance and General Commercial Liability Insurance, BE will furnish certification upon written request. The Client agrees that BE will not be liable or responsible to the Client for any loss, damage, or liability beyond the amounts, limits, exclusions, and conditions of such insurance.
- 16. PROFESSIONAL LIABILITY The Client agrees to limit liability to an amount of \$25,000 or BE's fee, whichever is less and to indemnify BE for any claims or costs from any construction contractor or subcontractor who performs work for which BE has provided reports, plans, and specifications. BE assumes no liability whatsoever for deliverables or reports that are submitted in only draft form. BE's reports, findings, recommendations and/or conclusions are valid for a period of a maximum of one (1) year, or until such time, whichever is less, that the subject property or its components has been modified to a different condition than that observed and reported within the reports covered under the Proposal and Contract.
- 17. INDEMNIFICATION FOR HAZARDOUS MATERIALS The Client agrees that BE has not contributed to the presence of hazardous wastes, oils, asbestos or other hazardous materials that may exist or be discovered in the future at the site and that BE does not assume any liability for the known or unknown presence of such materials. Therefore, the Client shall defend, indemnify, and hold harmless BE, its consultants, subcontractors, agents, and employees from and against all claims, damages, losses, and expenses including defense costs and lawyer's fees including those that result from the failure to detect or from the actual, alleged, or threatened discharge, dispersal, release, or escape of any solid, liquid, gaseous or thermal irritant, asbestos in any form, or contaminants including smoke, vapor, soot, fumes, acids, alkalies, chemicals, waste, oil or other hazardous material. The Client shall be liable under this paragraph for claims, damages, losses, and expenses including defense costs and expenses including defense costs and attorney's fees, unless such claims, damages and losses and expenses are caused by BE's gross negligence.
- 18. PUBLIC RESPONSIBILITY The Client acknowledges that the Client or the site owner, as the case may be, is now and shall remain in control of the site for all purposes at all times. Except as required by law, BE does not undertake to report to any federal, state, county, or local public agencies having jurisdiction over the subject matter any conditions existing at the site from time to time that may present a potential danger to public health, safety, or the environment. The Client agrees to notify each appropriate federal, state, county, and local public agency, as they each may require, of the existence of any condition at the Site that may present a potential danger to public health, safety, or the environment. Notwithstanding the provisions of the foregoing, BE will comply with subpoenas, judicial orders or government directives, and federal, state, county and local laws, regulations and ordinances, and applicable codes regarding the reporting to the appropriate public agencies of findings with respect to potential dangers to public health, safety, or the environment. BE shall have no liability or responsibility to the Client or to any other person or entity for reports or disclosures made in accordance with such statutory or other lawful requirements. The Client shall defend, indemnify, and hold BE harmless from and against any and all claims, demands, liabilities and expense, including reasonable attorneys' fees incurred by BE and arising directly or indirectly out of BE's reporting such information under a bona fide belief or upon advice of counsel that such reporting or disclosure is required by law.
- 19. SUSPENSION OF WORK The Client may, at any time, by a ten (10) day written notice, suspend further work for BE as such work is defined by this Contract. The Client shall remain fully liable for and shall promptly pay BE the full amount for all services rendered by BE to the date of suspension of services plus suspension charges. Suspension charges shall include the cost of putting documents and analyses in order, personnel and equipment rescheduling or reassignment adjustments, and all other related costs and charges directly attributable to suspension. If payment of invoices by the Client is not maintained on a thirty (30) day current basis, BE may, by providing a ten (10) day written notice to the Client, suspend further work until payments are restored to a current basis. In the event BE engages counsel to enforce overdue payments, the Client shall reimburse BE for all reasonable attorney's fees and court costs related to

enforcement of overdue payments. The Client shall indemnify and save harmless BE from any claim or liability resulting from suspension of the work due to non-current payments.

20. STANDARD BILLING TERMS

LABOR BILLING RATES

Daniel Bellucci = \$200/hour

Expert witness testimony or participation at hearings or depositions, including necessary preparation time will be charged at 150% of the above rates.

OTHER DIRECT COSTS

Charges for travel, equipment rental and subcontractors are made at cost plus 15%. An administrative charge of 3% of labor billings is made to cover costs associated with telephone, reproduction, faxes, delivery charges, etc.

ESTIMATED COST

Cost estimates are based upon our best judgment of the requirements known at the time of proposal. Unforeseen circumstances and changing client needs can affect project costs. BE will notify the client in advance if costs are expected to exceed the estimate. In such event, the client may wish to authorize additional funds, redefine the work to fit the remaining funds or request that work be stopped at a specific expenditure level.

BILLING TERMS

Invoices will be issued monthly and are due and payable upon receipt. Invoices not paid within 30 days shall be subject to interest at the rate of 1.5% per month.

- 21. TERMINATION Either party may terminate this Agreement for cause upon giving the other party not less than seven (7) calendar days written notice for any of the following reasons: substantial failure by the other party to perform in accordance with the terms of this agreement and through no fault of the terminating party and/or material changes in the conditions under which this Agreement was entered into, the scope of services or the nature of the project or the failure of the parties to reach agreement on the compensation and schedule adjustments necessitated by such changes.
- 22. CHOICE OF LAW This Agreement shall be deemed executed and delivered within the State f New York, and all rights and obligations of the parties under this Agreement, and any disputes hereunder, shall be governed by the law of the State of New York.
- 23. DRAFTING NOT TO BE CONSTRUED AGAINST ANY PARTY The parties acknowledge and agree that each has had a full opportunity to review and have input into this Contract and that any ambiguity found shall not be construed against any party as drafter.
- 24. INDEPENDENT CONTRACTOR BE is being retained by Client pursuant to this Contract as an independent contractor, and nothing herein or otherwise shall be construed to make BE an employee, agent or representative of Client. BE shall not represent to third parties that it represents Client or is the agent of Client. BE is responsible for and shall have complete control over all necessary labor, equipment, insurance and materials to perform the Services, and for determining the best means to perform the services subject to, and in order to satisfy, the requirements of this Contract.
- 25. ASSIGNMENT This Contract may not be assigned by either party hereto without the prior written consent of the other party.
- 26. SURVIVAL The provisions of this Contract shall survive the completion of the Services and the scope of work for each Project or the earlier termination of this Contract and/or the scope of work.

- 27. FORCE MAJEURE A delay in or failure of performance of either party hereto shall not constitute default hereunder or give rise to any claim for damages if and to the extent such delay or failure is caused by occurrences beyond the control of the party affected, including but not limited to: acts of God or the public enemy; compliance with any order, action, or request of a governmental authority affecting to a degree, not presently existing, the supply, availability, or use of information, materials or labor; acts of war; public disorders; rebellion or sabotage; floods; riots; strikes; pandemics; labor or employment difficulties whether direct or indirect; or any causes, whether or not the class or kind of those specifically named above, not within the control of the party affected and which, by the exercise of a reasonable diligence, said party is unable to prevent. A party which is prevented from performance and within a reasonable time set forth the anticipated extent of the delay. Should either party's performance hereunder be delayed beyond the control of or without the fault or negligence of such party, the parties to this Contract shall confer to reach an agreement on the conditions upon which the work shall be continued, or otherwise terminated.
- 28. SEVERABILITY. Any article or provision of this contract which may be deemed in violation of law shall not affect in any manner the remaining provisions of this contract.
- 29. ENTIRE AGREEMENT This Contract constitutes the entire agreement between Client and BE with respect to the services and supersedes all prior negotiations, representations and agreements.

THE OBAR GBR89 COMPACT RADIAL BLOWER



Based on 25 years of experience and 2 years of research and development, the patent pending GBR series of compact radial blowers provide the perfect combination of performance and design.

PERFORMANCE

- GBR89 HA 14" WC at 100CFM max flow 500 CFM.
- Built in speed control to customize performance.
- Condensate bypass built in.
- 12 month warranty 40,000 hr sealed bearings.



GBR89 WITH ROOF MOUNT

DESIGN

- Our modular design means the blower and manifold assembly can be removed and replaced as a unit. This makes repairs cost effective and easy and allows contractors to upgrade systems simply by swapping assemblies.
- The GBR series is based on a bypass blower designed to handle combustible materials.
- The housing is not required to be air tight so you can add gauges and alarms without compromising the system.
- Built in condensate bypass.
- Built in speed control.
- Quick disconnect electrical harness.
- All UL listed components including UL listed enclosure for outside use.
- Wall fastening lugs included.
- GBR series roof and wall mounts available to quickly configure the blowers for your installation while providing a custom built look.
- Compact design 18"x 16"x 10" weighing only 18 lbs.
- 4" schedule 40 inlet and 6" schedule 40 exhaust.

1. COST GBR89 HA

COMPLETE UNIT	\$1,789.00
3 YEAR WARRANTY	\$650.00

Enclosure Specifications Rating:

Ingress Protection (EN 60529): 66/67

Electrical insulation: Totally insulated

Halogen free (DIN/VDE 0472, Part 815): yes

UV resistance: UL 508

Flammability Rating (UL 746 C 5): complies with UL 508

Glow Wire Test (IEC 695-2-1) °C: 960

NEMA Class: UL Type 4, 4X, 6, 6P, 12 and 13

Certificates: Underwriters Laboratories



OBAR SYSTEMS INC 2969 ROUTE 23 SOUTH NEWFOUNDLAND, NJ 07435 800 949 6227

Nautilair (TM) 8.9" (226mm) Variable Speed Blower

240 Volt AC Input, Single Phase, High Output





		Part/ Model Number					
Specification	Units	150240	150241	150242			
Speed Control	-	Mechanical	0-10 VDC	PWM			

Notes:

- Input Voltage Range: 216 264 Volts AC RMS, 50/60 Hz, single phase.
- Input Current: 10 amps AC RMS
- Operating Temperature (Ambient Air and Working Air): 0°C to 50°C
- Storage Temperature: -40°C to 85°C
- Dielectric Testing: 1800 Volts AC RMS 60 Hz applied for one second between input pins and ground, 3mA leakage maximum.
- Speed Control Methods: PWM (Pulse Width Modulation). Speed control input signal of 15 45 VDC @ 500 Hz 10 kHz, and tachometer output (2 Pulses / Revolution).
 Optional tachometer output (3 Pulses / Revolution).
- 0 to 10 VDC with a speed control input current of 5 mA to 20 mA at 10 VDC Input with multi-turn potentiometer set to minimum resistance (fully clockwise).
- Mechanical: A potentiometer is available for speed control of the blower. The potentiometer can be preset for a specific speed. Access for speed adjustment located in motor housing. 4-20mA speed control available.
- Approximate Weight: 9.3 Lbs. / 4.2 Kg.
- Option Card available for Customization
- Regulatory Agency Certification: Underwriters Laboratories Inc. UL507 Recognized under File E94403 and CSA C22.2#133 under File LR43448
- Design Features: Designed to provide variable airflow for low NOX & CO emission in high efficiency gas fired combustion systems. Built with non-sparking materials. Blower housing assembly constructed of die cast aluminum. Impeller constructed from hardened aluminum. Rubber isolation mounts built into blower construction to dampen vibration within the motor. Two piece blower housing assembly sealed with O-ring gasket for combustion applications. Customer is responsible to check for any leakage once the blower is installed into the final
- application.
- Miscellaneous: Blower inlet, discharge, and all motor cooling inlet and discharge vents must not be obstructed. Motor ventilation air to be free of oils and other foreign particles, (i.e. breathing quality air). Blower is to be mounted so ventilation air cannot be re-circulated.
- POWER CONNECTION (3 CAVITY): Blower connector, AMP Universal MATE-N-LOK, part no. 1-480701-0.
- **POWER CONNECTION (5 CAVITY):** Blower connector, AMP Universal MATE-N-LOK, part no. 350810-1.
- SPEED CONNECTION (5 CAVITY): Blower connector, Molex Mini-Fit Jr., part no. 39-01-4057.

Mating harnesses available upon request.

This document is for informational purposes only and should not be considered as a binding description of the products or their performance in all applications. The performance data on this page depicts typical performance under controlled laboratory conditions. AMETEK is not responsible for blowers driven beyond factory specified speed, temperature, pressure, flow or without proper alignment. Actual performance will vary depending on the operating environment and application. AMETEK products are not designed for and should not be used in medical life support applications. AMETEK reserves the right to revise its products without notification. The above characteristics represent standard products. For product designed to meet specific applications, contact AMETEK Technical & Industrial Products Sales department.





High Voltage Brushless DC Blowers

Nautilair (TM) 8.9" (226mm) Variable Speed Blower

240 Volt AC Input, Single Phase, High Output

Typical Performance



Flow (m³/hr)

Nautilair

Data presented represents blower performance at STANDARD AIR DENSITY, .075 lb/ft³ (29.92" Hg, Sea Level, 68° F) Vacuum performance available upon request.

This document is for informational purposes only and should not be considered as a binding description of the products or their performance in all applications. The performance data on this page depicts typical performance under controlled laboratory conditions. AMETEK is not responsible for blowers driven beyond factory specified speed, temperature, pressure, flow or without proper alignment. Actual performance will vary depending on the operating environment and application. AMETEK products are not designed for and should not be used in medical life support applications. AMETEK reserves the right to revise its products without notification. The above characteristics represent standard products. For product designed to meet specific applications, contact AMETEK Technical & Industrial Products Sales department.





GBR89 HA tested at full voltage with 8 feet of 4" inlet (Blue Lines) and 6" Inlet (Green lines) Maximum airflow with no exhaust piping and 8' of 6" piping is 529 CFM

GBR89 MA tested with speed control set to half the wattage consumption (Red Line)



THE OBAR GBR76 COMPACT RADIAL BLOWER



Based on 25 years of experience and 2 years of research and development, the patent pending GBR series of compact radial blowers provide the perfect combination of performance and design.

PERFORMANCE

- GBR76 SOE 16" WC @ 0 Max flow 155 CFM.
- GBR76 UD 40" WC @ 0 Max flow 195 CFM.
- Built in speed control to customize performance.
- Condensate bypass built in.
- 12 month warranty 40,000 hr sealed bearings.



GBR76 WITH ROOF MOUNT

DESIGN

- Our modular design means the blower and manifold assembly can be removed and replaced as a unit. This makes repairs cost effective and easy and allows contractors to upgrade systems simply by swapping assemblies.
- The GBR series is based on a bypass blower designed to handle combustible materials.
- The housing is not required to be air tight, so you can add gauges and alarms without compromising the system.
- Built in condensate bypass.
- Built in speed control.
- Quick disconnect electrical harness.
- All UL listed components including UL listed enclosure for outside use.
- Wall fastening lugs included.
- GBR series roof and wall mounts available to quickly configure the blowers for your installation while providing a custom built look.
- Compact design 16"x 14"x 8" weighing only 18 lbs.
- 3" schedule 40 inlet and exhaust.
- Universal Drive model accepts voltage from 120-240V without alteration

COST	GBR76 SOE	GBR76 UD		
COMPLETE UNIT	\$1289.00	\$1489.00		
3 YEAR WARRANTY	\$450.00	\$550.00		

GBR76 SOE	0"	2"	4"	6"	8"	10"	12"	16"	Wattage
SOE 16	150	140	129	118	105	90	75	35	150-320
SOE 12	125	115	100	83	62	39	0		110-200
SOE 8	105	90	70	42	0				60-120
SOE 4	75	50	0						37-50

GBR SOE performance using built in potentiometer set at sealed vacuums of 16, 12, 8, and 4" WC

GBR76 UD	0"	10"	20"	30"	37"	Wattage
110V	195	158	118	63	20	700-870
220V	197	162	130	89	50	800-1100

Blower Specifications

Notes:

- Input Voltage Range: 108-132 Volts AC RMS, 50/60 Hz, single phase.
- Input Current: 6 amps AC RMS
- Operating Temperature (Ambient Air and Working Air): 0°C to 50°C
- Storage Temperature: -40°C to 85°C
- Dielectric Testing: 1500 Volts AC RMS 60 Hz applied for one second between input pins and ground, 3mA leakage maximum.
- Speed Control Methods: PWM (Pulse Width Modulation) (1 kHz to 10 kHz) 0 to 10 VDC speed control.

Mechanical: A potentiometer is available for speed control of the blower. The potentiometer can be preset for a specific speed. Access for speed adjustment located in motor housing.

Approximate Weight: 4.8 Lbs. / 2.2 Kg

Regulatory Agency Certification: Underwriters Laboratories Inc. UL507 Recognized under File E94403 and compliant under the CE Low Voltage Directive 2006/95/EC.

Design Features: Designed to provide variable airflow for low NOx & CO emission in high efficiency gas fired combustion systems. Built with non-sparking materials. Blower
housing assembly constructed of die cast aluminum. Impeller constructed from hardened aluminum. Rubber isolation mounts built into blower construction to dampen vibration
within the motor. Two piece blower housing assembly sealed with O-ring gasket for combustion applications. Customer is responsible to check for any leakage once the blower is
installed into the final application.

• Miscellaneous: Blower inlet, discharge, and all motor cooling inlet and discharge vents must not be obstructed. Motor ventilation air to be free of oils and other foreign particles, (i.e. breathing quality air). Blower is to be mounted so ventilation air cannot be re-circulated.

POWER CONNECTION: Blower connector, AMP Universal MATE-N-LOK, part no. 1-350943-0.

SPEED CONNECTION: Blower connector, Molex Mini-Fit Jr., part no. 39-30-3056.

Mating harnesses available upon request.

Enclosure Specifications

Ratings:

Ingress Protection (EN 60529): 66/67



Screw cover

Electrical insulation: Totally insulated

Halogen free (DIN/VDE 0472, Part 815): yes

UV resistance: UL 508

Flammability Rating (UL 746 C 5): complies with UL 508

Glow Wire Test (IEC 695-2-1) °C: 960

NEMA Class: UL Type 4, 4X, 6, 6P, 12 and 13

Certificates: Underwriters Laboratories



OBAR SYSTEMS INC 2969 ROUTE 23 SOUTH NEWFOUNDLAND NJ 07435 800 949 6227

GBR 25 Mini Digital Differential Pressure Gauge With Alarm



System alarms and monitoring made simple and affordable.

Finally a product that has what you need and can be easily installed.

The GBR 25 is a compact stand alone system gauge with an audible and visual alarm that works for VOC and Radon systems operating at system pressures greater than 2" wc. Included is a second relay that can be used to trigger additional alarms.

Includes Power supply

Optional 4-20 MA or 0-10 outputs can be used to monitor system pressure.

Contact OBAR for a quote to build custom alarm panels for your needs.

Applications and features

- Scale 0-40 inches WC eliminates need for multiple gauges.
- Visual and audible alarm included and factory set at 1" WC The alarm set point can be changed in the field.
- Second adjustable relay for triggering additional alarms.
- Optional 4-20 MA or 0-10 output for data.
- Accuracy is up to ±1% FS, with large LCD display.
- Function keys: zero reset, units select, display update time, automatic sleep time, alarm, etc.

Specifications

Medium: Non-combustible, non-corrosive air, insensitive to moisture, dust, condensation and oil Working Temp.: 20~70°C Medium Temp.: 0~60°C Temp. Compensation: 0~50°C Working Pressure: overload 10xFS, burst 15xFS Display: 5 bits LCD, with engineering unit & backlight Output: 0-10V / 4-20mA (3 wires) Output load: ≤500Ω (current), ≥2KΩ (voltage) Relay Output: 2×SPST, 3A/30VDC, 3A/250VAC or 1xBuzzer Accuracy: up to ±1.0%FS(±2.0%FS@25Pa range) Long term stability: ±0.5%FS /Year Thermal effect: <0.05%FS/°C (zero), <0.08%FS/°C(FS) Power type 16~28VDC/AC 24V Power Supply included Process Connection: 5mm ID tubing, two pairs (left/back) Keys: 3 touch buttons Protection: IP54 Approval: CE Display update time: selectable for 0.5/1/5/10s (default 1s)



Other OBAR products you may be interested in.

DPT(DPT-F Flush Mount) Differential Pressure Transmitter



Pricing: \$125 per unit Add \$20 for 4-20 mA / 0-10V version

Custom options and bulk order pricing available. Call or email for details.

Low Profile Custom Alarm Panel

Features

Pre-wired solution for SSDS systems.

Vacuum tube connections pre-labeled to corresponding gauge.

Hinge orientation can be customized.

Secondary relay can be used for secondary alarm/MarCell Pro monitor or upgrade to a 4-20 mA/0-10v output for remote monitoring capability.

Low profile, wall mountable design.

Power supply included.

Custom labeling available.



