November 26th, 2024

1370443 Ontario Limited
c/o The Behar Group Realty Inc.
1170 Sheppard Avenue West, Unit 24
Toronto, ON M3K 2A3

Re: Air Quality and Land Use Compatibility Assessment
The Queensway & Fordhouse Boulevard Etobicoke, Ontario
GW File No.: 21-060- Land Use Compatibility

1. INTRODUCTION

Gradient Wind Engineering Inc. (Gradient Wind) has been retained by 1370443 Ontario Limited to undertake a land use compatibility study for the proposed development located 1543-1551 The Queensway & 66 & 76 Fordhouse Boulevard in Etobicoke, Ontario. The complete scope of work within our mandate includes a preliminary review and professional opinion in terms of expected air quality and noise impacts on the development, such as the impact of emissions from nearby commercial and industrial sources as applicable. The study is based on the Ontario Ministry of Environment, Conservation and Parks (MECP) Land Use Compatibility Guidelines (D-Series)[1] and other relevant MECP guidelines; Official Plan Policy 2.2.4(17)[2]; The Provincial Policy Statement (PPS 2024)[3]; the City of Toronto Traffic Related Air Pollution (TRAP) report[4],; as well as digital maps received from the City of Toronto.

The focus of this land use compatibility study is the subject site located on a nearly rectangular parcel of land bounded by The Queensway to the north, single houses and Algie Avenue to the east, Fordhouse Boulevard to the south, and commercial lands to the west. The site is currently occupied by low-rise commercial buildings. The proposed development, which will replace the low-rise commercial buildings, comprises four (4) buildings; Buildings A, B, C, and D lined from north to south, respectively. Building A

[1] Ministry of Environment, Conservation and Parks. *Environmental Land Use Planning Guides.* King's Printer for Ontario, October 2022
[2] City of Toronto. *Official Plan and Guidelines: Chapter 2 – Shaping the City*. City of Toronto. October 2022.
[3] Ministry of Municipal Affairs and Housing. *Provincial Policy Statement, 2024.* Queen's Printer for Ontario, 2024
[4] City of Toronto. *Avoiding the TRAP: Traffic-Related Air Pollution in Toronto and Options for Reducing Exposure*, October 2017

has 22 storeys rising above an 8-storey podium, for a total height of 30 storeys. Building B has 28 storeys rising above a 7-storey podium, for a total height of 35 storeys. Buildings C and D have 40 and 45 storeys, respectively, each rising above 7 storey podia.

The site is surrounded by low-rise commercial properties to the west and north, residential and commercial properties to the east, and The Queensway and Fordhouse Boulevard adjacent to the north and south property lines, respectively. The Gardiner Expressway and residential-use land is situated beyond Fordhouse Boulevard to the south. Land-uses surrounding the study site can be seen in Figures 1 and 2.

The relevant pollution sources surrounding the site include existing nearby industrial and commercial facilities. Other facilities which could produce adverse effects on a neighbouring property include railway transportation corridors and/or associated lands/buildings. The study site is located approximately 510 m to the west of the GO Transit Rail corridor. Additionally, transportation is not considered within the MECP D-Series guidelines. However, the City of Toronto has created a report detailing the impacts of roadway traffic pollution on sensitive buildings and ways to mitigate such impacts. Therefore, odour and air quality impacts from transportation sources are addressed in Section 5 of this study.

The sources of transportation noise impacting the site include The Queensway and the Gardiner Expressway. Impacts of these roadway are addressed in a stand-alone report, prepared by Gradient Wind. The current land use compatibility assessment also provides commentary on the potential impact of existing and future nearby stationary sources on the subject sites. The closest railway is the GO Rail Line located approximately 500 metres to the east of the site. As the nearest railway corridor is beyond 300 m from the site's property line, noise and ground vibration impacts from the rail corridor do not need to be considered as per the proximity rail guidelines[5].

Whie the terms of reference suggest a review of complaints be undertaken. It should be noted that information regarding complaints and/or concerns with regards to air quality and/or noise are predominantly obtained via a Freedom of Information (FOI) request made to the Ministry of Ontario

[5] Guidelines for New Development in Proximity to Railway Operations, prepared for the Federation of Canadian Municipalities and The Railway Association of Canada by Dialog J.E. Coulter Associates Limited, May 2013.

Freedom of Information Office. Complaint history gathered from this request is typically a useful tool during the preliminary evaluation stage of the nearby facilities. However, taking into account the exceptionally long processing time necessary for each FOI request, in addition to the intrinsic nature of the focus area and its surroundings, Gradient Wind concluded that the information gathered from the FOI request would not be a crucial aspect of the analysis and would likely have a negligible impact on the overall findings. Gradient Wind reach out nearby relevant industries to collect additional information regarding daily operations where applicable.

2. STUDY METHODOLOGY

2.1 Land Use Compatibility in relation to Provincial Policy Statement (PPS)

Related to land use compatibility, the Provincial Policy Statement (PPS 2024) policy 3.5.1 states:

> *Major facilities and sensitive land uses shall be planned and developed to avoid, or if avoidance is not possible, minimize and mitigate any potential adverse effects from odour, noise and other contaminants, minimize risk to public health and safety, and to ensure the long-term operational and economic viability of major facilities in accordance with provincial guidelines, standards and procedures.*

Where *major facilities* are defined as*:*

> *Facilities which may require separation from sensitive land uses, including but not limited to airports, manufacturing uses, transportation infrastructure and corridors, rail facilities, marine facilities, sewage treatment facilities, waste management systems, oil and gas pipelines, industries, energy generation facilities and transmission systems, and resource extraction activities.*

Based on a review of the surroundings, the only major facilities, as defined by the PPS, in proximity to the development are arterial roads, the Gardner Expressway, and Billy Bishop Airport.

Policy 3.4.1 of the PPS states:

> *Planning for land uses in the vicinity of airports, rail facilities and marine facilities shall be undertaken so that:*

a) *their long-term operation and economic role are protected; and*

b) *airports, rail facilities and marine facilities and sensitive land uses are appropriately designed, buffered and/or separated from each other, in accordance with policy 3.5*

There are no airports, rail facilities, or marine facilities within the influence zone of the Subject Lands that noise, emission, dust or odour would be of a concern.

The surrounding employment/industrial lands (zoning E) permit a variety of possible future uses, including manufacturing facilities, warehousing, waste processing and automotive repair facilities. These industries may be classified as Class I, II, or III, and would be required to conduct an environmental impact assessment for Environmental Compliance Approval (ECA) to ensure any expansion project would remain compatible with the surrounding land uses, including approved proposed developments.

2.2 Identifying Critical Points of Impingement

The critical points of impingement for this study include fresh-air intakes, public sidewalks, walkways, building entrances, balconies, and terraces/green roofs devoted to common amenity space. Different receiver location types can have varying exposure times and sensitivities to pollutants. For instance, fresh air intakes continuously provide air to the building's mechanical systems and can affect a large number of the building's occupants, making them the most sensitive. Main entrances operate intermittently, predominantly during daytime hours; therefore, the sensitivity of these locations is lower.

2.3 Identifying Emissions Sources

Following the definition of the critical points of impingement, a review of the study area was conducted to locate sources of airborne pollutants and odours. In general, emission sources that are considered as potentially influential to residential properties include nearby, existing commercial/industrial facilities.

Industrial processes are bound by the requirements of Section 9 of the Environmental Protection Act (EPA) R.S.O 1990 and Ontario Regulation (O. Reg.) 419/05 - Air Pollution and Local Air Quality. Section 9 of the Environmental Protection Act states that "*No person shall, except under and in accordance with an*

environmental compliance approval, use, operate, construct, alter, extend or replace any plant, structure, equipment, apparatus, mechanism or thing that may discharge or from which may be discharged a contaminant into any part of the natural environment other than water". Despite compliance to Section 9 of the EPA, a facility may be liable under Section 14 of the EPA if they permit the discharge of a contaminant, including odour, which causes an adverse effect. Under O. Reg 419/05 "*a person shall not discharge a contaminant or cause or permit the discharge of a contaminant into the natural environment, if the discharge causes or may cause an adverse effect*".

In order to obtain and maintain an Environmental Compliance Approval (ECA) (formerly referred to as a Certificate of Approval (CoA)), the emitting source must show compliance with O. Reg. 419/05. Compliance with O. Reg. 419/05 for air emissions is shown through an Emissions Summary and Dispersion Modelling (ESDM) report. An ESDM report quantifies all emissions from a facility and must demonstrate, through air dispersion modelling, that contaminant concentrations are below standards prescribed in O.Reg 419/05 at all points of impingement.

However, some industries may be exempt from Section 9 depending on the type of industry and operation occurring on site but are still required to be considered for planning purposes through other assessments (e.g., stationary noise studies as per NPC-300 guidelines).

To minimize the potential for adverse impacts of industrial activities on sensitive land uses the MECP has provided guidelines for adequate buffering of incompatible land uses under "Guideline D-6 Compatibility Between Industrial Facilities and Sensitive Land Uses". The minimum separation distances are based on both the size of a facility and the scope of industrial activities within the facility, classified as Class I, II, or III, for light, medium and heavy industrial uses, respectively. Table 1 summarizes the recommended separation distance and potential area of influence for each class. A sensitive development may be permitted within an industrial influence zone if appropriate air quality studies are undertaken and potential causes of adverse effects are mitigated.

TABLE 1: D-6 RECOMMENDED SEPERATION & INFLUENCE AREA

Class	Minimum Recommended Separation Distance (m)	Potential Influence Area (m)
I	20	70
II	70	300
III	300	1000

3. AIR QUALITY, NOISE, AND FUGITIVE EMISSIONS ASSESSMENT RESULTS

Based on a review of the surroundings via aerial imagery and a search of the MECP "Access Environment" database of registered ECA and EASR permit holders, there are a number of industrial-use properties surrounding the site within 1000 m of the study site. Our findings indicate there are three Class I, five Class II, and one Class III industries within 1000 m of the study site.

Class I Industries

53 Algie Avenue

The property at 53 Algie Avenue, known as DG Auto Electric Ltd., is an automotive repair shop. The site has an existing Environmental Compliance Approval (ECA#: 9026-8K6KL7) and is located approximately 65 meters from the nearest study site property line. The ECA indicates that sources of emissions include a paint spray booth for solvent-based coatings. Gradient Wind had contacted the facility and they confirmed that they do not perform any painting operations at the site; they specialize in automotive electrical component repairs. The property is not within the minimum separation distance. Due to the setback distance from the study site and closer proximity to existing residential dwellings to the east, in addition to not performing painting services, no significant sources of emissions, odours or noise are expected from the facility at the study site.

1541 The Queensway

The property at 1541 The Queensway, houses both Goodman Autowork and Tint Queensway. These industries specialize in automotive repairs and are located within 20 meters from the subject site property line. As these industries do not have an ECA, emissions from these sources are expected to be negligible and have an insignificant impact on the subject site. Additionally, the property is located at a similar

setback distance from an existing residential property to the east. Therefore, no significant sources of emissions, odours or dust are expected from the facility at the study site.

It should be noted that a garage door is located at the south façade of the building that could be a source of stationary noise onto the proposed development. Given the site's relative distance to The Queensway and the Gardiner Expressway, background noise generated by the roadways is expected to dominate and mask stationary noise from nearby facilities. The proposed development will likely require upgraded building components to address roadway noise, as discussed in Section 5, which will assist in mitigating noise within noise sensitive areas. Alternative mitigation measures could include the inclusion of a noise wall or a buffer region at the northeast corner of the site, such as a courtyard or greenspace, to increase the separation distance between the garage and the noise sensitive spaces. Once a concept plan with massing elements is established, it is advised that a feasibility study be conducted to determine the stationary noise impacts from the garage.

1571 The Queensway

The property at 1571 The Queensway, known as Superbilt Shutters & Window Fashion Inc., is shutters and blinds facility. The site has an existing Environmental Compliance Approval (ECA#: 6966-5XLS2X). The ECA indicates that sources of emissions include a paint spray booth for solvent-based coatings, and a natural gas fired air make up unit. This facility is classified as a Class I facility and is located to the west of the subject site approximately 123 m to the nearest property line. This is beyond the potential influence area for Class I facilities. Due to the setback distance from the study site, no significant sources of emissions, odours or noise are expected from the facility at the study site.

Class II Industries

24 Atomic Avenue

The property at 24 Atomic Avenue, known as Canadian Linen And Uniform Service Co., is a commercial laundry facility which rents, cleans, and maintains uniforms and sheets. The site has an existing Environmental Compliance Approval (ECA#: 4484-8U5QZE) and is located approximately 270 meters from the nearest study site property line. The processes performed at the site include receiving and sorting of soiled linen, uniforms and mats, as well as air stripping on the effluent discharge line to remove volatile organic compounds from the wastewater. The property is not within the minimum separation distance.

Due to the setback distance from the study site, no significant sources of emissions, odours or noise are expected from the facility.

496 Evans Avenue

The property at 496 Evans Avenue, known as MERSEN Canada DN Ltd., is a facility that manufacturers carbon brushes for motors. The site has an existing Environmental Compliance Approval (ECA#: 42139FLQ7B) and is located approximately 230 meters from the nearest study site property line. The processes performed at the site include cutting, sanding, griding, buffing, metalizing, and soldering. Sources of emissions include a baghouse dust collector and curing oven. The property is not within the minimum separation distance. Due to the setback distance from the study site and closer proximity to existing residential dwellings to the south, no significant sources of emissions, odours or noise are expected from the facility at the study site. The site meets the minimum set back distance from a Class II industry.

10 Diesel Drive

The property at 10 Diesel Drive, known as Wajax (formerly known as Harper Detroit Diesel Limited), is an industrial equipment manufacturer and service provider. The site has an existing Environmental Compliance Approval under Harper Detroit Diesel Limited (ECA#: 7127-7DHKNX) and is located approximately 110 meters from the nearest study site property line. However, operations at the time the ECA was conducted are expected to be comparable to current operations performed under Wajax. Sources of emissions include a paint spray booth for solvent based coatings, various natural gas fired combustion equipment, a standby generator, maintenance welding station, and a parts washing system. The property is not within the minimum separation distance. Due to the setback distance from the study site and closer proximity to existing residential dwellings to the south (Alderwood neighbourhood), no significant sources of emissions, odours or noise are expected from the facility at the study site.

14 Vansco Road

The property at 14 Vansco Road, known as PointOne Graphics Inc., is a custom printing facility. The site has an existing Environmental Compliance Approval (ECA#: 1181-9JEHK5) and is located approximately 300 meters from the nearest study site property line. The processes performed at the site include plate developing, press cleaning, and dust collection. Sources of emissions include coldset and heatset

lithographic printing presses, and Integrated Dryer-Thermal Oxidizers serving the heatset printing presses. The property is not within the minimum separation distance. Due to the setback distance from the study site, no significant sources of emissions, odours or noise are expected from the facility at the study site.

450 Evans Avenue

The property at 450 Evans Avenue, known as Cascades Canada ULC, is a corrugated box manufacturing facility. The site has an existing Environmental Compliance Approval (ECA#: 7544-7PUK54). Sources of emissions include natural gas fired boilers, a baghouse dust collector, exhaust systems serving cascade wax/corrugated machines, a bag filter system serving the starch storage silo, an exhaust system from a wastewater flocculation, oil separation and adsorption treatment system, and an exhaust system serving the liquid room area. The property's foundation is situated within 300 meters from the nearest study site property line, however the primary noise and emission producing sources are situated at the southeast corner of the facility approximately 420 meters from the study site. Due to the setback distance of the primary sources from the study site, and closer proximity to existing residential dwellings to the south of Evans Avenue (Alderwood neighbourhood), no significant sources of emissions, odours or noise are expected from the facility at the study site. The site is also favourably upwind of the facility, based on prevailing wind directions. Furthermore, noise from the facility is expected to be below ambient noise levels generated from roadway traffic along the Gardiner Expressway.

Class III Industries

74 North Queen Street

The property at 74 North Queen Street, known as Northcrete Concrete Supply Limited, is a ready-mix concrete batching plant. The site has an existing Environmental Compliance Approval (ECA#: 4613AXKJU2). Sources of emissions include silos for the storage of cement and cement supplement material, baghouse dust collectors with filters and pulse jet cleaning mechanisms, a No. 2 fuel oil boiler, as well as fugitive emissions resulting from the delivery, storage, and transfer of materials associated with the concrete batching operations. The property's boundary is situated approximately 530 meters from the nearest study site property line, however the primary noise and emission producing sources are situated at the northwest corner of the facility approximately 800 meters from the study site. Due to the setback distance of the primary sources from the study site, no significant sources of emissions, odours or noise are expected from the facility at the study site.

Obsolete Industries

111 Brockhouse Road

The property located at 111 Brockhouse Road, currently operating as Supreme Sweets Inc., was previously owned by a commercial bakery industry under the name of Euro Breads Inc. The only existing ECA #07628CBQKA is associated with the previous owner and is therefore considered obsolete.

1460 The Queensway

The property located at 1460 The Queensway, was recently converted to a Dymon Self Storage facility. The existing ECA: #7021-4TFTR5 is for the previous owner Mylex Limited. Therefore the existing ECA associated with the property is considered obsolete and is no longer applicable.

1631 The Queensway

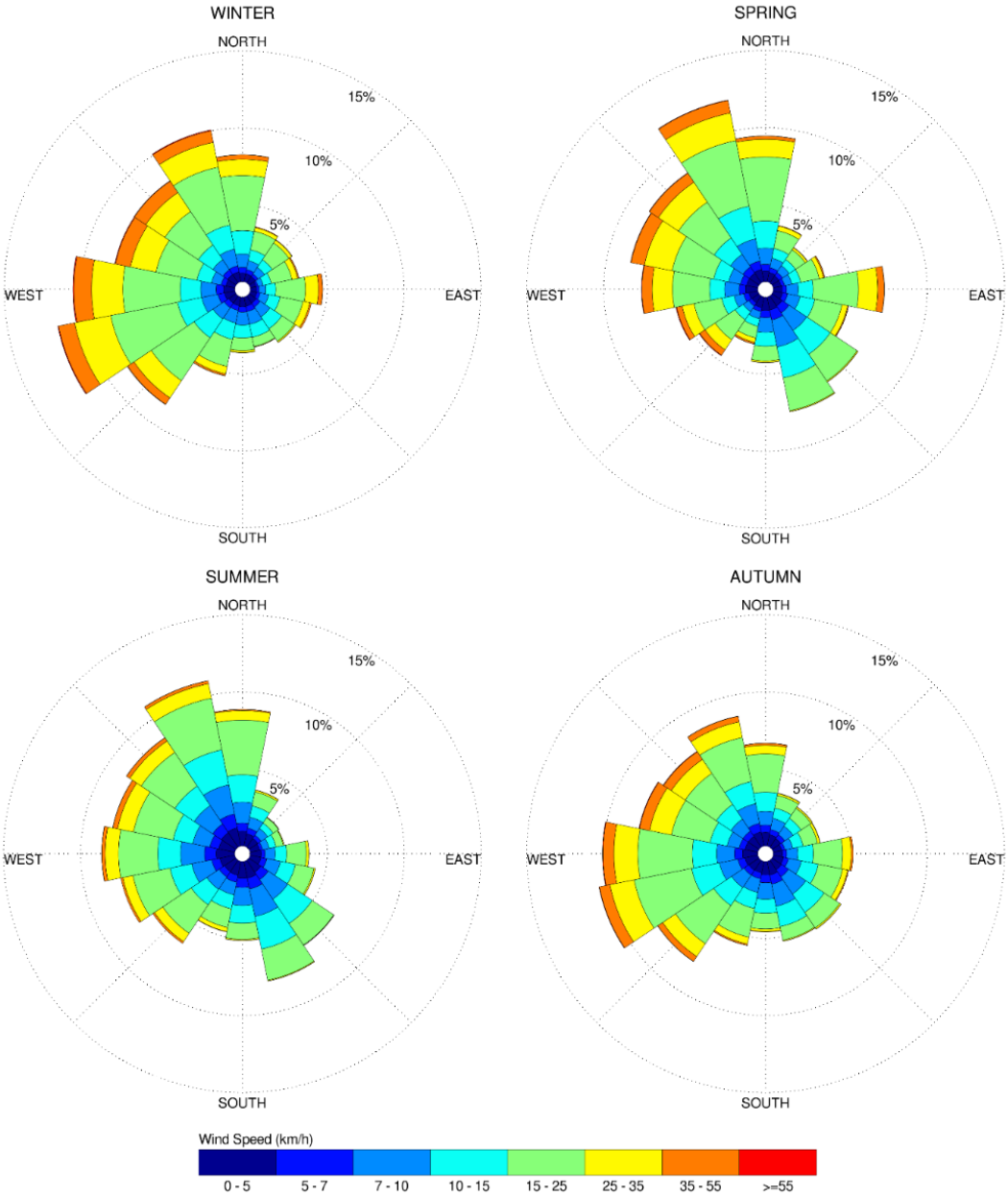
The property located at 1631 The Queensway, is scheduled for two retail buildings as well as a fitness center, which are currently under construction. The existing ECA: # 4395-9KCK3T is for the previous owner Plastic Moulders Limited. Therefore the existing ECA associated with the property is considered obsolete and is no longer applicable.

3.1 Meteorological Data Analysis

A statistical model for winds in Toronto was developed from approximately 40-years of hourly meteorological wind data recorded at Lester B. Pearson International Airport and obtained from Environment and Climate Change Canada. Wind speed and direction data were analyzed for each month of the year in order to determine the statistically prominent wind directions and corresponding speeds, and to characterize similarities between monthly weather patterns. Based on this portion of the analysis, the four seasons are represented by grouping data from consecutive months based on similarity of weather patterns, and not according to the traditional calendar method.

The statistical model of the Toronto area wind climate, which indicates the directional character of local winds on a seasonal basis, is illustrated on the following page. The plots illustrate seasonal distribution of measured wind speeds and directions in kilometers per hour (km/h). Probabilities of occurrence of different wind speeds are represented as stacked polar bars in sixteen azimuth divisions. The radial direction represents the percentage of time for various wind speed ranges per wind direction during the measurement period. The common wind speeds and directions can be identified by the longer length of the bars. For Toronto, the most common winds concerning pedestrian comfort occur from the southwest clockwise to the north, as well as those from the east. The directional preference and relative magnitude of the wind speed varies somewhat from season to season, with the summer months displaying the calmest winds relative to the remaining seasonal periods. Westerly winds are favourable for the study site, which will force emissions from the industries to north, east and south, away from critical points of impingement on the study site.

SEASONAL DISTRIBUTION OF WIND
LESTER B. PEARSON INTERNATIONAL AIRPORT, TORONTO, ONTARIO



Notes:

1. Radial distances indicate the percentage of time of wind events.
2. Wind speeds are mean hourly in km/h, measured at 10 m above the ground.

4. STATIONARY NOISE IMPACTS

4.1 Existing and Future Buildings onto 1543-1551 The Queensway and 66, 70, and 76 Fordhouse Boulevard

Gradient Wind also investigated the potential stationary noise impacts from nearby industrial/commercial properties surrounding the study site. As previously mentioned, the site is surrounded by low-rise commercial properties to the west and north, residential and commercial properties to the east, and The Queensway and Fordhouse Boulevard adjacent to the north and south property lines, respectively.

The properties to the west, 1555 The Queensway, 1557 The Queensway, and 1561 The Queensway, are considered to be the properties with the largest number of exposed mechanical equipment nearest to the subject site. Based on satellite imagery, the buildings are serviced by standard HVAC equipment for the building type. The mechanical equipment is positioned on a roof deck with a high parapet. It is likely the proposed building will rise serval storeys which increases the potential for noise sensitive receptors to have direct line of site with the equipment. However, given the site's relative distance to The Queensway and the Gardiner Expressway, background noise generated by the roadways is expected to dominate and mask stationary noise from nearby existing buildings. The proposed development will likely require upgraded building components to address roadway noise, as discussed in Section 5, which will assist in mitigating noise within noise sensitive areas. Once a concept plan with massing elements is established, it is advised that a feasibility study be conducted to determine the stationary noise impacts from the mechanical equipment.

4.2 1543-1551 The Queensway and 66, 70, and 76 Fordhouse Boulevard onto Existing and Future Buildings

Stationary noise impacts from the proposed development onto the surroundings and itself would be addressed at a future phase once the mechanical equipment design has progressed and information becomes available. Stationary noise sources associated with the development could include rooftop air handling units, cooling towers or dry coolers, and emergency generators. Noise from these sources can be controlled to acceptable limits established by MECP by judicious selection of the equipment, locating

the equipment on a high roof away from nearby residential receptors, and where necessary, installing silencers or noise screens.

5. TRANSPORTATION AIR QUALITY AND NOISE IMPACTS

5.1 Noise

The primary sources of transportation noise impacting the site include The Queensway and the Gardiner Expressway. The subject property is considered compatible with existing transportation noise sources with the inclusion of noise mitigation measures, such as upgraded building components, ventilation requirements, and Warning Clauses. See the noise study for more details.

5.2 Air Quality

Similarly, the dominant sources of transportation emissions include The Queensway and the Gardiner Expressway. This is based on their distance relative to the subject site as well as their roadway classifications.

Roadways are not considered within the MECP D-Series guidelines, however, the City of Toronto has created a report detailing the impacts of roadway traffic pollution onto sensitive buildings and ways to mitigate such impacts. This report is titled "*Avoiding the TRAP: Traffic-Related Air Pollution in Toronto and Options for Reducing Exposure*". Based on the findings of the report, emission impacts due to The Queensway is to have a greater influence compared to emission impacts due to the Gardiner Expressway. This is primarily due to the separation distance; closer transportation sources typically have greater emission impacts mostly at the lower floors.

The following is a list of a few suggested mitigation strategies presented in the TRAP report to address air pollution impacts from transportation sources:

- Implementing barriers between sources and sensitive areas (i.e., physical or vegetation).
- Consideration for the location and orientation of individual buildings and outdoor amenity areas (i.e., position sensitive areas as far as possible from roadways and buffered by transitional uses).
- Mechanical building ventilation with Minimum Efficiency Reporting Value (MERV) 8 certification particulate filters.

- Where possible, only opening windows on the side of buildings that face away from TRAP sources.
- Locating ventilation intakes away from transportation sources (i.e., the highest point of the building).

It should be noted that only opening windows on the side of buildings that face away from TRAP sources may not be feasible from a design and administrative perspective. Therefore, it is important to include appropriate ventilation systems in the sensitive spaces such as centralized air conditioning, or similar equipment, to allow residents to keep windows closed and achieve a comfortable indoor environment.

With that notion, the subject property is considered to be compatible with existing TRAP sources with the inclusion of select air quality mitigation measures described above. As these are suggested mitigation strategies, it is advised that a detailed assessment be completed at a future stage to determine the appropriate air quality mitigation specific to the development.

6. IMPACTS ON EMPLOYMENT LANDS

In recent years, the neighbourhood of the proposed study site has not experienced much change from a development perspective. According to the Toronto Official Plan Land Use Plan map[6], the land use designation of the subject site and adjacent properties comprise of General Employment Areas and Core Employment Areas. Residential zones lands are limited to areas south of Evans Avenue.

The City of Toronto's Official Plan Policy 2.2.4(17)[7] and Official Plan Amendment No. 231[8] emphasize the importance of preserving employment lands as much as reasonably possible within the city. Employment Areas provide locations for diverse employment opportunities, keep the production of goods and shipping near populated areas, help maintain and grow the City's economy, and help achieve a balance in the growth of population and employment[9].

[6] City of Toronto. *Official Plan Maps: Land Use – Map 15.* City of Toronto. October 2022.
[7] City of Toronto. *Official Plan and Guidelines: Chapter 2 – Shaping the City*. City of Toronto. October 2022.
[8] City of Toronto. *Planning and Development: Zoning Conformity for Official Plan Employment Areas*. City of Toronto. October 2022.
[9] City of Toronto. *Planning and Development: Zoning Conformity for Official Plan Employment Areas*. City of Toronto. October 2022.

A review of development applications within a 500 m radius of the subject site revealed several requests for lot severances and expansions for industrial/commercial use. No other residential applications were observed. With that notion, should the proposed development at 1543-1551 The Queensway and 66, 70, and 76 Fordhouse Boulevard be granted approval for residential use, it is not expected to have any land compatibility issues or conflicts with the existing or future employment lands.

7. RESULTS AND CONCLUSIONS

In keeping with standard building construction and good engineering practice, as well as City of Toronto and MECP guidelines, the following comments and recommendations are to be incorporated into the design of the building to ensure indoor air quality and noise levels are maintained to acceptable standards for the proposed development:

(i) Based on the findings of this report, Gradient Wind concludes that the residential sensitive land use is feasible.

(ii) The development meets the minimum setback distance from established industries operating with a valid ECA.

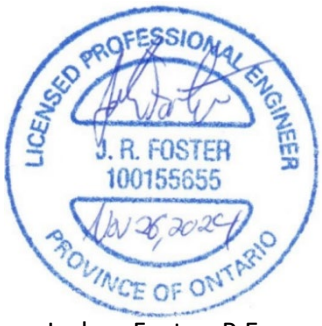
(iii) In line with standard building practices, appropriate provisions include the design, installation, operation, and maintenance of air filtration at the fresh air intakes of the mechanical systems serving all habitable areas, including the addition of air conditioning. The areas that would not require filtered air would be parking garages and utility spaces. Minimum Efficiency Reporting Value (MERV) 8-10 certification filters should be used for this development in all occupied spaces. Details of the air filtration system will be designed by the mechanical engineers during the detailed design phase.

(iv) Under reasonable future growth scenarios for roadway traffic volume, technological improvements and more stringent emission standards will likely result in lower emissions and improved air quality for the site over time.

This concludes our land use compatibility study and report. If you have any questions or wish to discuss our findings, please advise us. In the interim, we thank you for the opportunity to be of service.

Sincerely,

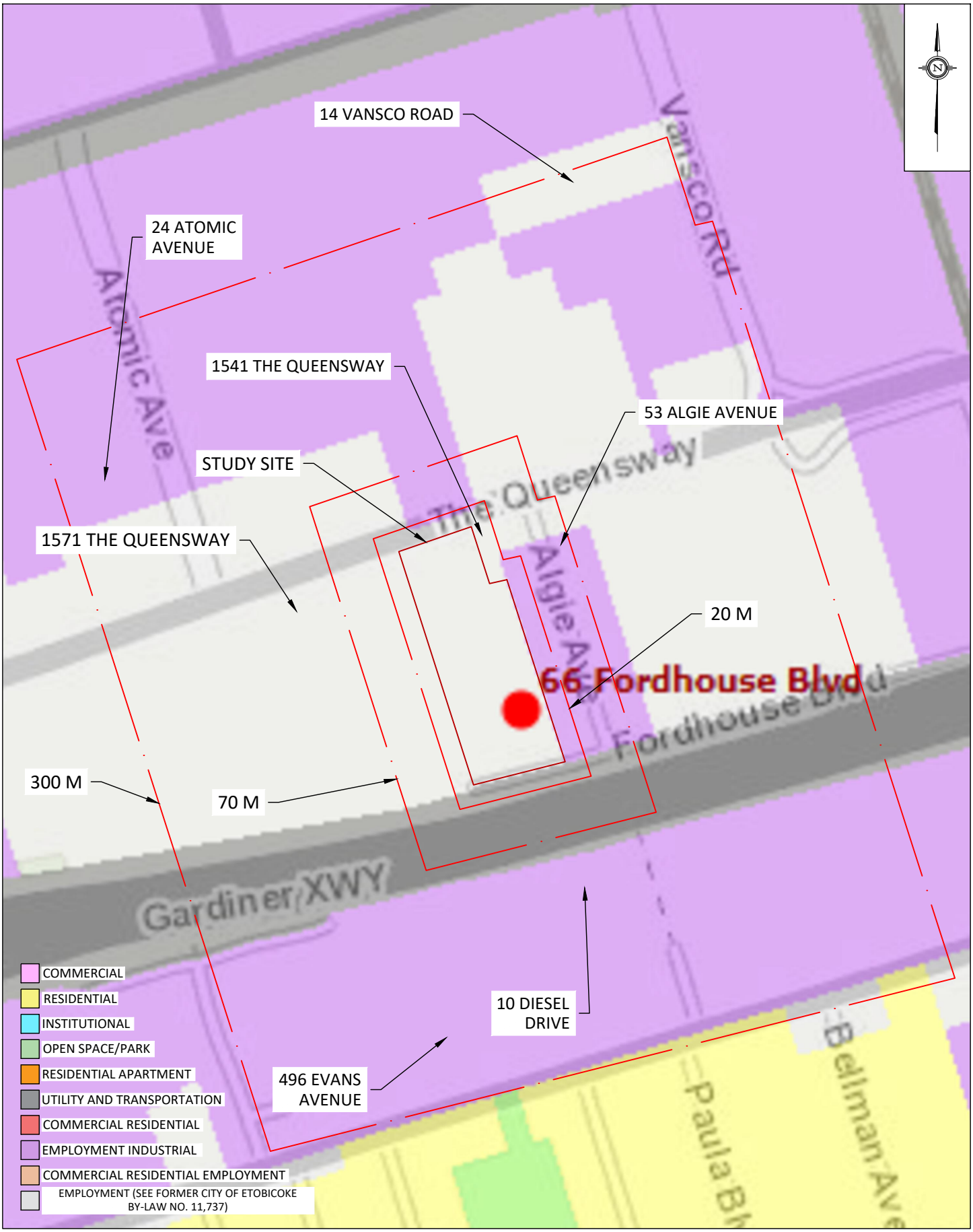
Gradient Wind Engineering Inc.



Efser Kara, MSc, LEED GA
Acoustic Scientist

Joshua Foster, P.Eng.
Lead Engineer

Gradient Wind File #21-060 R2

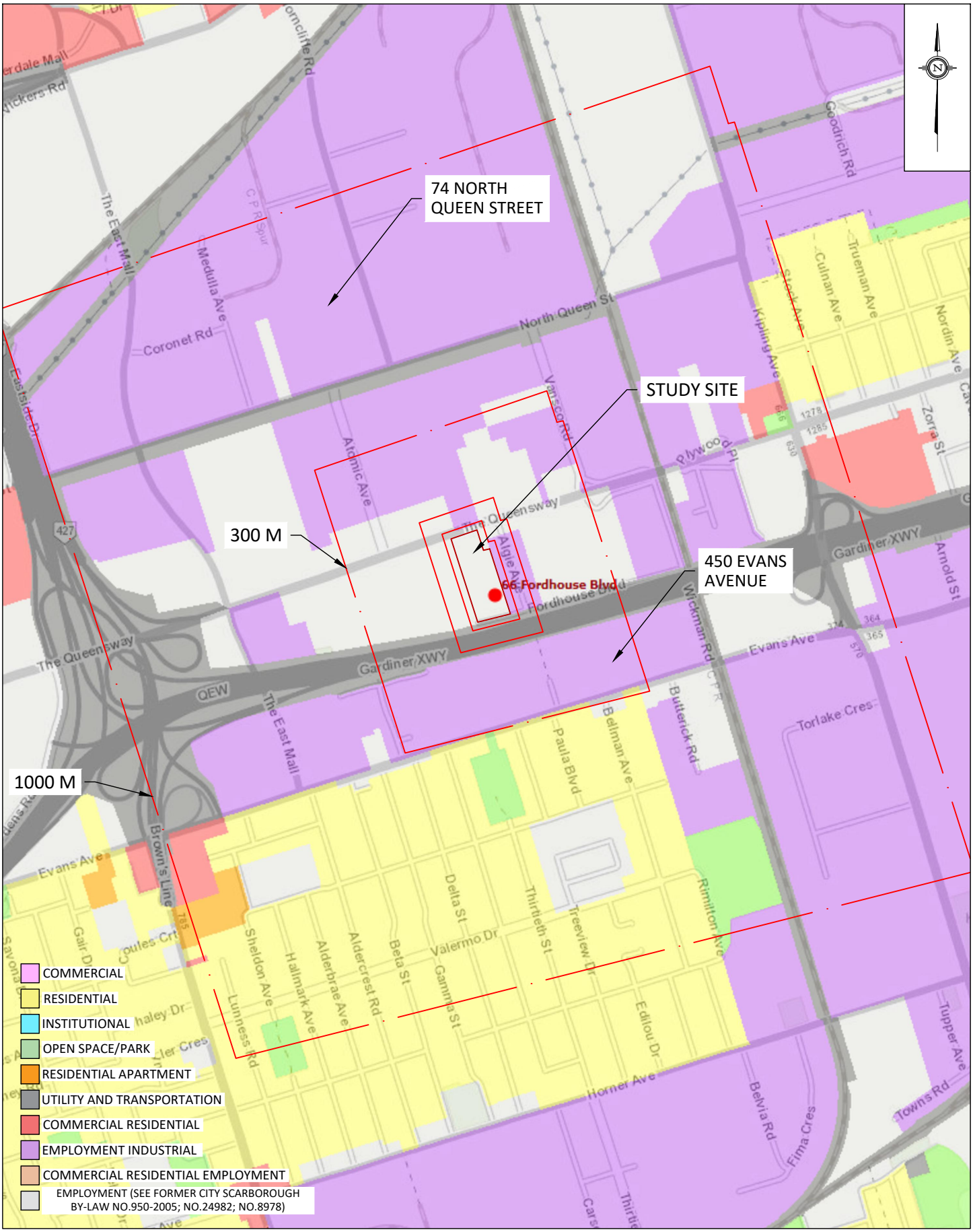


GRADIENTWIND
ENGINEERS & SCIENTISTS
127 WALGREEN ROAD, OTTAWA, ON
613 836 0934 • GRADIENTWIND.COM

PROJECT	1543-1551 THE QUEENSWAY & 66, 70, & 76 FORDHOUSE BOULEVARD, ETOBICOKE LAND USE COMPATIBILITY ASSESSMENT
SCALE	1:5000
DRAWING NO.	GW21-060-1
DATE	JANUARY 27, 2023
DRAWN BY	G.G.

DESCRIPTION

FIGURE 1:
PROPERTY LINE AND SURROUNDING CONTEXT



GRADIENTWIND
ENGINEERS & SCIENTISTS

127 WALGREEN ROAD, OTTAWA, ON
613 836 0934 • GRADIENTWIND.COM

PROJECT	1543-1551 THE QUEENSWAY & 66, 70, & 76 FORDHOUSE BOULEVARD, ETOBICOKE LAND USE COMPATIBILITY ASSESSMENT
SCALE	1:14000
DRAWING NO.	GW21-060-2
DATE	JANUARY 27, 2023
DRAWN BY	G.G.

DESCRIPTION

FIGURE 2:
PROPERTY LINE AND SURROUNDING CONTEXT