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FEASIBILITY ENVIRONMENTAL NOISE AND VIBRATION REPORT

PROPOSED RESIDENTIAL DEVELOPMENT
91 EGLINTON AVENUE EAST
CITY OF MISSISSAUGA
REGION OF PEEL

JADE ACOUSTICS

Prepared for
91 Eglinton Limited Partnership

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SUMMARY

The proposed residential development is located at 91 Eglinton Avenue East in the City of Mississauga at the northeast quadrant of Hurontario Street and Eglinton Avenue East. The proposed development includes five (5) residential towers and associated podia, as well as three (3) townhouse blocks. The site is affected by road traffic noise, including the future Hurontario Light Rail Transit (LRT), aircraft noise from Toronto Pearson International Airport and by existing commercial operations.

The environmental noise guidelines NPC-300 for transportation and stationary noise sources of the Ministry of the Environment, Conservation and Parks (MOE), set out sound level limits for both the indoor (transportation sources only) and outdoor space (both transportation and stationary sources). Sound levels due to the nearby roads and the existing commercial sources were determined and compared to the MOE and Region of Peel/City of Mississauga guidelines to determine the appropriate mitigation measures.

Using road traffic data obtained from the City of Mississauga and Metrolinx and aircraft traffic data from Transport Canada, the sound levels for various locations in the residential development were determined. The analysis of the noise sources associated with the commercial developments was based on information collected by Jade Acoustics Inc. during site visits and from other similar facilities available in Jade Acoustics Inc. files.

To address road traffic noise, central air conditioning, upgraded exterior wall, exterior door and window construction will be required for some buildings. When final building plans are available, sound level predictions and architectural requirements should be verified, to ensure applicable guidelines are met.

The mechanical drawings and detailed information regarding the mechanical equipment associated with the proposed development, including but not limited to rooftop HVAC units and garage fans were not available at the time of preparation of this noise report. Once mechanical drawings are available, additional noise analysis will need to be conducted to determine if the selected mechanical equipment requires noise mitigation measures.

Several options have been investigated in this preliminary report to address the stationary noise sources. Section 5.2 provides details.

The proposed residential development was evaluated using the MOE noise criteria for stationary sources applicable to both a Class 1 area and a Class 4 area.

Currently, the proposed site is considered to be a Class 1 area; therefore, if the Class 4 option is chosen, the land use planning authority would need to approve the new classification based

on the noise analysis and incorporate a Class 4 designation in a site specific zoning by-law or alternate planning document, as determined by the City.

Where minor excesses exist and noise mitigation measures are required, future occupants will be advised through the use of warning clauses.

1.0 INTRODUCTION

Jade Acoustics Inc. was retained by 91 Eglinton Limited Partnership to update the Feasibility Environmental Noise Report dated September 10, 2018, to investigate the potential noise and vibration impact on the proposed residential development to the satisfaction of the City of Mississauga and Regional Municipality of Peel. This updated report addresses updated plans and comments from the City of Mississauga on the September 10, 2018 report.

An evaluation of the potential acoustic impact between the suite units and all internal acoustic matters is outside of the scope of work of this feasibility report.

The proposed site is identified as:

91 and 131 Eglinton Avenue East, and 5055 Hurontario Street
City of Mississauga
Region of Peel

The proposed residential development is located at the northeast quadrant of Hurontario Street and Eglinton Avenue East. Surrounding land uses are existing and future residential and commercial developments. The proposed development is located between the NEF/NEP 27 and 28 contour lines of Toronto Pearson International Airport.

The analysis was based on:

- Site plan prepared by Dialog dated January 18, 2019, received April 24, 2019;
- Architectural elevations prepared by Dialog received on June 4, 2019;
- Road traffic information provided by the City of Mississauga and Metrolinx;
- Toronto Pearson International Airport Operating Area (AOA) and Composite Noise Contours map, prepared by the Greater Toronto Airports Authority, dated December 15, 2005;
- Metrolinx Hurontario-Main LRT Project Noise and Vibration Impact Assessment Report – Appendix B.6, prepared by J.E. Coulter Associates Limited, dated June 4, 2014;
- Metrolinx Hurontario/Main Street LRT Preliminary Engineering and TPAP Plan, Profile and Typical Sections Appendix to Environmental Project Report – Appendix A.1, prepared by SNC Lavalin, dated June 4, 2014; and
- Site visits conducted by Jade Acoustics Inc. on July 12, 2018 and May 14, 2019.

A Key Plan is attached as Figure 1.

Figure 2 shows the proposed residential development which includes five (5) towers and associated podia, a single storey amenity building (Building C), townhouse blocks, outdoor at grade amenity spaces, a public park and new internal roads.

2.0 NOISE SOURCES

2.1 Transportation Sources

2.1.1 Road and Light Rail

The primary ground transportation noise source of potentially adverse impact is the road traffic on Eglinton Avenue East and Hurontario Street and the proposed Hurontario LRT.

The ultimate road traffic data for Eglinton Avenue East and Hurontario Street was provided by the City of Mississauga.

Hurontario Light Rail Transit (LRT) information was obtained from the Metrolinx website and has been confirmed to be the most current available data by the City of Mississauga. The potential impacts of both noise and vibration from the future LRT on the subject site have been assessed.

See Appendix A for correspondence regarding the road traffic information and Table 1 for a summary of traffic information.

This site is not impacted by heavy rail or existing industrial noise sources.

2.1.2 Aircraft

The site is located between the NEF/NEP 27 and 28 contour lines due to aircraft traffic associated with Toronto Pearson International Airport.

Aircraft traffic information was obtained from Transport Canada and is summarized in Table 1. Figure 3 shows the composite 1996 NEP (Noise Exposure Projection) and 2000 NEF (Noise Exposure Forecast) contour map for Toronto Pearson International Airport for the area surrounding the proposed development. These contours are included on a figure dated December 15, 2005.

2.2. Stationary Sources

2.2.1 Stationary Sources within the Development

The identified mechanical sources of noise which may acoustically impact the adjacent residential developments include, but may not be limited to rooftop equipment and garage exhaust fans. These potential noise sources will be addressed in a detailed noise report when information becomes available, through the building permit process.

2.2.2 Stationary Sources External to the Development

There are several existing commercial buildings located to the west and south of the proposed site. The commercial buildings are shown on Figures 1 and 4 and include:

- Multi-tenant commercial plaza to the southwest with tenants that include but not limited to:
  - Shoppers Drugmart;
  - Flower Shop;
  - Dental Office;
  - Doctor's Office;
  - Cobs Bread;
  - Variety Plus;
  - LCBO;
  - Sleep Country;
  - Service Ontario;
  - Bombay Bhel;
  - BT Optical;
  - Montana's (currently closed);
  - Pet Value; and
  - Starbucks

- Multi-tenant commercial plaza to the southeast with tenants that include but not limited to:
  - Harvey's;
  - Saravanaa Bhavan;
  - Wang's Kitchen;
  - Cora's;
  - Expedia Cruise Ship Centers;
  - Kentucky Fried Chicken (KFC);
  - Bashu Restaurant;
  - Dental Centre;

- Hair Salon;
- Ideal Optical;
- Pizza Hut;
- Toys R Us;
- LA Fitness;
- Home Interiors Furniture; and
- Oceans

A site visit was conducted on May 14, 2019 by Jade Acoustics Inc. staff to inventory noise sources associated with the commercial plaza to the south of Armdale Road. Questionnaires were also provided to select businesses with the greatest potential to have an acoustical impact on the subject site, in order to gain a better understanding of their operations. Where a response was provided, the completed questionnaires have been included in Appendix G.

A detailed noise source inventory for the existing commercial developments on the south side of Eglington Avenue East and/or west of Hurontario Street was not completed; information for representative units for similar facilities from Jade Acoustics Inc. files was used for the assessment. Due to separation distance and intervening road traffic on Eglinton Avenue East and Hurontario Street, noise sources associated with these developments are not anticipated to be acoustically significant at the subject site.

Section 4.2 includes details of the noise assessment.

3.0 ENVIRONMENTAL NOISE CRITERIA

The environmental noise criteria used for residential developments in the City of Mississauga, Region of Peel and the Ontario Ministry of the Environment, Conservation and Parks (MOE) environmental noise criteria are contained in Appendix B and summarized below.

The Ontario Ministry of the Environment, Conservation and Parks document "Environmental Noise Guideline Stationary and Transportation Sources – Approval and Planning, Publication NPC-300", dated August 2013, released October 21, 2013, (updated final version # 22) has been used in this assessment.

3.1 Transportation Sources

3.1.1 Indoors

If the nighttime (11:00 p.m. to 7:00 a.m.) sound level in terms of Leq at the exterior face of a bedroom or living/dining room window is equal to or greater than 60 dBA and/or if the daytime (7:00 a.m. to 11:00 p.m.) sound level in terms of Leq at the exterior face of a living/dining room or bedroom window is greater than 65 dBA, means must be provided so that windows can be kept closed for noise control purposes and central air conditioning is required. For nighttime sound levels (LeqNight) greater than 50 dBA to less than or equal to 59 dBA on the exterior face of a bedroom or living/dining room window or daytime sound levels (LeqDay) greater than 55 dBA to less than or equal to 65 dBA on the exterior face of a bedroom or living/dining room window, there need only be the provision for adding central air conditioning by the occupant at a later date. This typically involves a ducted heating system sized to accommodate the addition of central air conditioning by the occupant at a later date. A warning clause advising the occupant of the potential interference with some activities is also required.

As required by the MOE, to determine the building component requirements the indoor noise criteria for road traffic noise is 40 dBA (Leq8hour) for the bedrooms during nighttime hours, 45 dBA (Leq8hour) for the living/dining rooms during nighttime hours and 45 dBA (Leq16hour) for the living/dining rooms and bedrooms during daytime hours. These criteria are used to determine the architectural requirements.

3.1.2 Outdoors

For the outdoor amenity areas, a design goal of 55 dBA daytime (7:00 a.m. to 11:00 p.m.) sound level is used for road traffic. In some cases an excess not exceeding 5 dBA is considered acceptable. Where the unmitigated sound levels during the day exceed 55 dBA (Leq16hour, daytime) but are less than 60 dBA (Leq16hour, daytime), a warning clause is required and mitigation should be considered. Where the unmitigated sound levels during the

daytime hours exceed 60 dBA, mitigation measures and a warning clause are required.

The definition of outdoor amenity area as defined by the MOE is given below.

"Outdoor Living Area (OLA)

(applies to impact assessments of transportation sources) means that part of a noise sensitive land use that is:

- intended and designed for the quiet enjoyment of the outdoor environment; and
- readily accessible from the building.

The OLA includes:

- backyards, front yards, gardens, terraces or patios;
- balconies and elevated terraces (e.g. rooftops), with a minimum depth of 4 metres, that are not enclosed, provided they are the only outdoor living area (OLA) for the occupant; or
- common outdoor living areas (OLAs) associated with high-rise multi-unit buildings."

In this case all proposed balconies of the residential units are less than 4.0 m deep and as such are not considered to be noise sensitive receptors.

For both the indoor and outdoor conditions where the acoustical criteria are exceeded, warning clauses must be placed in offers of purchase and sale and/or lease agreements and included in the development agreement.

3.2 Aircraft

For the aircraft traffic noise, either the 1996 Noise Exposure Projection contour map (NEP) or the 2000 Noise Exposure Forecast contour map (NEF) is to be used, whichever is more conservative.

As of February 1, 1997, the Ministry of Municipal Affairs and Housing revised the Provincial Policy Statement. The revised policy does not allow residential development above NEF/NEP 30. This policy applies to new developments only and is not retroactive.

The updated MOE guidelines with respect to aircraft noise are summarized below.

If the NEF/NEP value is less than 25, no further assessment is required.
If the NEF/NEP value is equal or greater than 25 but less than 30, alternate means of ventilation and a warning clause are required. In addition, building components must be

designed to achieve the indoor sound level criteria.

The City of Mississauga requires mandatory central air conditioning and a warning clause for all units located at or above the NEF/NEP 29 contour.

The MOE indoor criteria for aircraft noise is NEF/NEP 0 for the bedrooms and NEF/NEP 5 for the living rooms.

See Appendix B for a summary of applicable criteria for both road and aircraft noise sources.

3.3 LRT Vibration

Vibration impact criteria have been outlined in Appendix B.6 of the Metrolinx report, noted in Section 1.0. Two aspects of vibration have been considered: ground-borne vibration and vibration induced noise. With respect to ground-borne vibration, the report establishes a limit of 0.1 mm/s (root mean square velocity, or RMS) at all sensitive receptors as the criteria. The ground-borne vibration criteria was based on the MOE/TTC Draft protocols dated May 11, 1993 and November 11, 1993. These criteria have been used in the analysis.

3.4 Stationary Sources

The guidelines of the Ontario Ministry of the Environment, Conservation and Parks (MOE) for stationary sources are to be used for the commercial facilities.

The MOE has recently published the document NPC-300 titled “Environmental Noise Guideline Stationary and Transportation Sources – Approval and Planning”.

The MOE also has vibration guidelines with respect to stationary sources, NPC-207. These guidelines require that the peak vibration velocities not exceed 0.3 mm/s at the point of reception during the day or night.

The MOE recognizes the need for back-up beepers/alarms as safety devices and as such does not have any guidelines or criteria to address these sources.

It should be noted that the MOE guidelines do not require that the source be inaudible, but rather that specific sound level limits be achieved.

With respect to stationary sources of noise in urban areas, the MOE guidelines require that the sound level due to the stationary source at the building façade and outdoor amenity spaces not exceed the sound level due to road traffic and in certain situations due to rail traffic in any hour of source operation, subject to specific exclusions. Tables C-5, C-6, C-7 and C-8 included in Appendix B provided the exclusion limit values of one-hour equivalent sound level (Leq,dBA) and impulsive sound level (L_{lm},dBAI).

In general, if the criteria for a stationary source of noise are exceeded, the MOE recommends that control be implemented at the source rather than at the receiver. Alternatively, if the receiver is set back from the source or if a physical barrier is constructed so that the criteria can be met at the receiver, no additional mitigative measures are required. In addition, a warning clause in offers of purchase and sale and/or lease agreements noting the proximity of dwellings to such a source should be considered. Treatment of the receptor building by the use of suitable exterior wall and window construction and central air conditioning to keep windows closed is not an acceptable solution to the MOE in Class 1 and 2 areas (urban). In addition, a warning clause in offers of purchase and sale and/or lease agreements noting the proximity of dwellings to such a source should be considered.

A Class 4 designation of a proposed residential use can be used to permit higher sound levels from neighbouring stationary sources. Based on the NPC-300 guidelines, Class 4 areas can only be established in Class 1 or 2 areas in proximity to existing, lawfully established stationary sources. This is not applicable in areas with existing noise sensitive land use(s) unless they are redeveloped/rezoned/replaced with new noise sensitive land use(s). Classification of a Class 4 area is subject to formal confirmation from the land use planning authority and continues as long as the stationary source(s) can potentially operate (i.e. until change in zoning).

Class 4 does not exempt the evaluation of the noise impact of the noise sources associated with the proposed building on the noise sensitive receptors within the proposed building.

Limits for Class 4 areas shown in Tables C-5, C-6, C-7 and C-8 assume closed windows together with a ventilation system which is in most situations, central air conditioning.

4.0 NOISE IMPACT ASSESSMENT

4.1 Transportation Sources

Road Traffic and Light Rail

Sound levels at the outdoor amenity spaces and at the building envelopes of the proposed residential dwellings in terms of Leq, the energy equivalent continuous sound levels for both day (16 hours) and night (8 hours) were predicted using ORNAMENT, the MOE Traffic Noise Prediction Model for road and light rail traffic. See Table 2 for a detailed summary. Appendix C contains sample calculations of the predicted sound levels.

Where applicable, screening by the existing residential and commercial developments surrounding the proposed site was included in the predictions.

For Building A, southeast façade, top residential floor (worst case receptor), the unmitigated sound levels at the façade are predicted to be up to 69 dBA for the daytime period (16 hours) between 7:00 a.m. and 11:00 p.m. and up to 62 dBA for the nighttime period (8 hours) between 11:00 p.m. and 7:00 a.m.

For Building A, southwest façade, top residential floor (worst case receptor), the unmitigated sound levels at the façade are predicted to be up to 67 dBA for the daytime period (16 hours) between 7:00 a.m. and 11:00 p.m. and up to 60 dBA for the nighttime period (8 hours) between 11:00 p.m. and 7:00 a.m.

Other buildings within the development are less exposed to Hurontario Street and/or Eglinton Avenue East than Building A; therefore, the predicted sound levels are less than the sound levels predicted at Building A and the required mitigation is expected to be reduced. This will be determined once the final building plans are available.

For Buildings A and B, outdoor amenity area, the unmitigated sound levels are predicted to be up to 49 dBA for the daytime period (16 hours) between 7:00 a.m. and 11:00 p.m. See Figure 2 for details of the outdoor amenity areas.

For Building D, fifth storey outdoor amenity area, the unmitigated sound level is predicted to be up to 41 dBA for the daytime period (16 hours) between 7:00 a.m. and 11:00 p.m.

For Building E, outdoor amenity area, the unmitigated sound levels are predicted to be up to 59 dBA for the daytime period (16 hours) between 7:00 a.m. and 11:00 p.m.

For Building G, ninth and thirteenth storey outdoor amenity areas, the unmitigated sound levels are predicted to be up to 46 dBA and 45 dBA, respectively, for the daytime period (16 hours) between 7:00 a.m. and 11:00 p.m.

For Building H1, south façade, the unmitigated sound level at the façade is predicted to be up to 58 dBA for the daytime period (16 hours) between 7:00 a.m. and 11:00 p.m. and up to 50 dBA for the nighttime period (8 hours) between 11:00 p.m. and 7:00 a.m. The predicted unmitigated sound level in the rear yard during the daytime period is 48 dBA.

The predicted sound levels at the at-grade outdoor amenity areas associated with Buildings C and G are screened from the traffic noise sources and are predicted to have a daytime sound level (16 hours) less than 55 dBA.

Where the sound level limits are expected to be exceeded, mitigative measures and warning clauses are required.

4.2 Aircraft Traffic

According to the 1996 Noise Exposure Projection (NEP) and 2000 Noise Exposure Forecast (NEF) contour maps for Toronto Pearson International Airport, this site is located between NEP/NEF 27 and 28 contours.

4.3 LRT Vibration

The future Hurontario LRT has been assessed with respect to the potential impact of ground-borne vibration on the subject site. The current assessment is based on information provided in Appendices A.1 and B.6 of the Metrolinx report outlined in Section 1.0. Based on discussions with the City, we understand that the information contained in these documents is the most detailed and current information available.

It is expected that the speed of the LRT along any road segment will coincide with the posted speed limit for the roadway, in each respective segment. Under this assumption, the LRT will travel at a maximum speed of 60 km/h in the vicinity of the subject site. According to the findings of the Metrolinx LRT report, the ground-borne vibration limits of 0.1 mm/s (RMS) are expected to be met at 20 m from the centreline of the nearest track. Based on the Metrolinx report, this assumes the implementation of a “Level 1” track isolation system, which is anticipated to be incorporated as a minimum for all areas with concrete embedded track systems.

As indicated in Appendix A.1 of the Metrolinx report, the LRT tracks will be aligned with the centreline of Hurontario Street, on either side. Based on the track alignment shown in the Metrolinx report and the location of the edge of the proposed buildings shown on the plans outlined in Section 1.0 (greater than 20 m), the predicted ground-borne vibration levels would achieve the 0.1 mm/s ground-borne vibration limit. In discussions with the

City of Mississauga, they indicated that the assumed track alignment is subject to change throughout the detailed design process of the LRT infrastructure. Should the detailed design result in predicted ground-borne vibration levels in excess of the prescribed limit, the level of vibration isolation implemented along this section of track may need to be increased or mitigation may need to be incorporated within the proposed building in order to provide additional mitigation to meet the guidelines. This is not anticipated to be required as the proposed buildings are setback well over 20 m from the currently proposed track alignment.

As noted in the Metrolinx report, vibration induced noise is also to be considered. It is noted in the Metrolinx report that at the setback distances to this development, the impacts of vibration induced noise are expected to meet the sound level limits. Therefore, vibration induced noise was not investigated further.

4.4 Stationary Sources

At the time of completion of this report, contact with the neighbouring commercial businesses to the south of Armdale Road was completed and investigation into associated noise sources was conducted. The noise source and approach to modelling are based on the noise source inventory as well as information collected through questionnaires. As noted in Section 2.2, questionnaires were provided to select businesses having the greatest potential to acoustically impact the subject site.

The investigation into the noise sources associated with the multi-tenant commercial developments south of Eglinton Avenue East and/or west of Hurontario Street was based on information previously collected during a Jade Acoustics Inc. site visit and information from other Jade Acoustics Inc. files.

Potentially significant noise sources associated with the neighbouring commercial businesses included in the analysis are:

- Multi-tenant commercial development (4 buildings) immediately southwest of the site:
  - rooftop HVAC units;
  - rooftop exhaust fans;
  - refrigerated and non-refrigerated tractor trailer manoeuvering; and
  - refrigerated tractor trailer idling.

- Multi-tenant commercial developments (5 buildings) southeast of the site, south of Eglinton Avenue East:
  - rooftop HVAC units;
  - rooftop exhaust fans;
  - refrigerated tractor trailer idling; and
  - refrigerated and non-refrigerated tractor trailer manoeuvering.
- Commercial developments at the southwest corner at Hurontario Street and Eglinton Avenue East:
  - rooftop HVAC units.
- Gas station at the northwest corner at Hurontario Street and Eglinton Avenue East:
  - rooftop HVAC unit.

Appendix D includes information regarding the sound power levels used in the calculations.

Figure 4 shows the location of the commercial buildings and noise sources analyzed.

For most of the rooftop HVAC units, duty cycles of 100% (daytime), 70% (evening) and 40% (nighttime) were accounted for in the analysis. A duty cycle of 100% for any hour during a 24 hour period was used for exhaust fans, during expected operating hours of the relevant facilities.

Traffic counts obtained from the City of Mississauga were used to predict ambient sound levels at the proposed residential buildings due to vehicle passbys on Hurontario Street and Eglinton Avenue East. As the ambient sound levels predicted during the quietest hours at many noise sensitive receptors do not exceed the MOE exclusion sound level limits for the Class 1 area, the MOE exclusion limits were considered applicable for the noise analysis for all receptors at this time as acoustically shielded building façades exist. Therefore, the predicted sound levels due to the stationary sources were compared with the MOE exclusion sound level limits of 50 dBA (daytime and evening hours) and 45 dBA (nighttime hours) to assess compliance with the Class 1 requirements.

The unmitigated sound levels in terms of one hour Leq were calculated for the façades (and relevant outdoor amenity areas) of all proposed buildings using the CadnaA 2018MR1 computer program, which uses International Standard Analytical Code ISO 9613-2. As the existing topography has no significant ground elevation changes, flat ground was used in the calculations.

Tables A and B were prepared showing the results of the analysis at the worst case building façades, for each of the worst case buildings. Figure 5 shows the predicted unmitigated sound levels at all building façades, and outdoor amenity spaces.

As shown in Table A, the predicted sound levels at some of the proposed buildings exceed the Class 1 sound level limits; therefore, mitigation measures are required.

The predicted sound levels were also compared with the MOE Class 4 exclusion sound level limits of 60 dBA (daytime and evening hours) and 55 dBA (nighttime), for completeness. As shown in Table B, exceedances were predicted; therefore, mitigation measures are required to meet the Class 4 sound level limits.

Compliance with the Class 4 sound level limits is predicted at all outdoor amenity areas shown on the site plan outlined in Section 1.0. This assumes a 1.2 m high typical glass safety railing/barrier at the third storey podium of Building E (R2 on Figures 4 and 5), which is the worst case outdoor amenity area receptor relative to stationary noise sources. These barriers are expected at all elevated outdoor amenity areas but were not required elsewhere within the model to demonstrate compliance with the sound level limits.

Due to the configuration of the buildings in the neighbouring commercial site, nature of the businesses and based on the information provided in completed questionnaires, impulsive noise sources were considered at this time to be acoustically insignificant and not investigated further.

TABLE A

SUMMARY OF PREDICTED SOUND LEVELS DUE TO CONTINUOUS NOISE SOURCES WITHOUT MITIGATION MEASURES – CLASS 1 AREA EXCLUSION LIMITS

Worst Case Receptor On	Predicted Sound Level (dBA)								
	Daytime			Evening			Nighttime		
	Predicted	Limit	Exceedance	Predicted	Limit	Exceedance	Predicted	Limit	Exceedance
Building A	64	50*	Yes	63	50*	Yes	61	45*	Yes
Building B	55	50*	Yes	54	50*	Yes	52	45*	Yes
Building D	54	50*	Yes	54	50*	Yes	51	45*	Yes
Building E	66	50*	Yes	66	50*	Yes	63	45*	Yes
Building G	52	50*	Yes	51	50*	Yes	49	45*	Yes
Building H1	34	50*	No	32	50*	No	30	45*	No
Building H2	36	50*	No	35	50*	No	32	45*	No
Building H3	38	50*	No	36	50*	No	34	45*	No

* Class 1 exclusion sound level limit.

Note: Building C is not a residential building.

TABLE B

SUMMARY OF PREDICTED SOUND LEVELS DUE TO CONTINUOUS NOISE SOURCES WITHOUT MITIGATION MEASURES – CLASS 4 AREA EXCLUSION LIMITS

Worst Case Receptor On	Predicted Sound Level (dBA)								
	Daytime			Evening			Nighttime		
	Predicted	Limit	Exceedance	Predicted	Limit	Exceedance	Predicted	Limit	Exceedance
Building A	64	60*	Yes	63	60*	Yes	61	55*	Yes
Building B	55	60*	No	54	60*	No	52	55*	No
Building D	54	60*	No	54	60*	No	51	55*	No
Building E	66	60*	Yes	66	60*	Yes	63	55*	Yes
Building G	52	60*	No	51	60*	No	49	55*	No
Building H1	34	60*	No	32	60*	No	30	55*	No
Building H2	36	60*	No	35	60*	No	32	55*	No
Building H3	38	60*	No	36	60*	No	34	55*	No

* Class 4 exclusion sound level limit.

Note: Building C is not a residential building.

5.0 NOISE ABATEMENT MEASURES

5.1 Transportation Sources

5.1.1 Indoors

Architectural Component Requirements

Indoor sound level criteria for road and light rail traffic can be achieved in all cases by using appropriate architectural elements for external wall, roof, window and exterior door construction. MOE indoor criteria for road and light rail traffic noise are 40 dBA (Leq8hour) for the bedrooms during nighttime hours, 45 dBA (Leq8hour) for the living/dining rooms during nighttime hours and 45 dBA (Leq16hour) for the living/dining rooms and bedrooms during daytime hours. These criteria have been used in this report. The characteristic spectra for the noise sources have been accounted for in the determination of the architectural components. Appendix E contains a sample calculation of architectural component selection.

Architectural plans including suite layouts were not available at this time. Once final dwelling plans become available, the noise control requirements should be re-evaluated.

In determining the architectural requirements, it is assumed that the worst case residential condition would involve a corner living/dining room. The exterior walls would be 30% and the windows 50% of the associated floor area for both the wall perpendicular to the noise source and the wall parallel to the noise source.

In order to determine the overall window and exterior wall requirements, the aircraft traffic has been included in the analysis. The requirements for each source (road/light rail and aircraft) were determined separately and then combined to determine the overall requirements.

Based on the preliminary analysis, for the worst case receptors, windows and exterior doors need to be STC 36 and exterior walls need to be STC 39 to provide the mitigation required for noise due to road, LRT and air traffic.

An STC 36 rating for windows and exterior doors and an STC 39 rating for exterior walls are upgrades above the minimum structural and safety requirements of standard construction.

The acoustical performance of a window as a whole depends on glass configuration/thickness, air space, material used for frames and construction details including seals. Therefore, the acoustical performance of the glass configuration alone expressed as a sound transmission class (STC) rating, generally available in the literature,

does not address the STC rating of the whole window. Glass configurations with different frame materials and/or construction details often produce different STC ratings. Therefore, it is recommended that prior to installation the window manufacturers provide proof (STC test results of window configuration from an accredited laboratory) that their windows meet the required STC ratings.

Ventilation Requirements

Where the sound level is equal to or greater than 60 dBA (at night) at the outside face of a bedroom window or living/dining room window or exceeds 65 dBA (during the day) on the outside face of a bedroom window or living/dining room window, the indoor noise criteria would not be met with open windows and provisions must be made to permit the windows to remain closed. The MOE requires central air conditioning. In addition, a warning clause is needed. Based on the analysis, most buildings require central air conditioning. See Table 3 and Figure 2.

Where the sound level is exceeded by 1 dB to 10 dB (i.e. LeqNight greater than 50 dBA to less than or equal to 59 dBA and LeqDay greater than 55 dBA to less than or equal to 65 dBA), the provision for adding central air conditioning by the occupants and a warning clause is required. This is not practicable in multi-tenant dwellings. Therefore, central air conditioning is generally used. Provision for adding central air conditioning is required for the Townhouse Blocks H1, H2 and H3. See Table 3 and Figure 2.

It is anticipated that all residential units will be provided with central air conditioning, thereby satisfying the acoustical requirements.

Warning clauses will also be required to be placed in offers of purchase and sale and/or lease agreements and in the development agreement for all relevant dwelling units to make future occupants aware of the potential noise environment.

See Table 3 and notes to Table 3 for details of minimum noise abatement measures required.

5.1.2 Outdoors

The outdoor amenity area is required to be exposed to a sound level of 55 dBA or less during the day. A 5 dBA increase is considered acceptable in certain situations. Typically, if the sound level is above 55 dBA, some form of mitigation is recommended and warning clauses are required. Where the sound levels exceed 60 dBA, mitigation and warning clauses are required.

In all cases, sound levels less than 60 dBA are predicted at the outdoor amenity areas and rear yards, as noted in Section 4.1 and Table 2.

Since the predicted sound levels are less than 60 dBA at all of the common outdoor amenity areas and rear yards associated with individual buildings, sound barriers are not required and are therefore not proposed at the subject site.

Once the final outdoor amenity space layouts are available, the required mitigation measures, if required can be determined.

All balconies and other private terraces which are less than 4.0 m in depth are not considered a noise sensitive space that require mitigation.

Where an excess will remain or where mitigation measures are required, a warning clause should be placed in offers of purchase and sale and/or lease agreements and in the development agreement. Warning clause requirements are listed in Table 3 and specific wording is included in the Notes to Table 3.

5.2 Stationary Sources

As discussed in Section 4.2, based on the stationary noise source review, noise mitigation measures are required to achieve the MOE sound level limits.

Based on the analysis, the Class 1 and Class 4 sound level limits will not be met, even with the use of physical mitigation measures at the source; therefore, the Class 4 sound level limits and additional mitigation have been assessed. The following options to address the stationary noise sources have been considered in this preliminary report:

- Option 1 - Designation of the new residential development as Class 4 and the use of physical mitigation measures in the form of enclosures around the loading bays on the existing commercial buildings to achieve the MOE Class 4 sound level limits; and

- Option 2 - Designation of the new residential development as Class 4 and the use of enclosed noise buffers on select building façades where the Class 4 limits are not achieved.

Based on the MOE NPC-300 guidelines, Class 4 designation can be used for new sensitive land uses adjacent to lawfully established stationary sources if approved by the municipality. Mandatory central air conditioning would also be required to satisfy the Class 4 requirements.

Currently, the proposed site is considered to be a Class 1 area; therefore, the land use planning authority would need to approve the new classification based on the noise analysis and incorporate Class 4 designation in a site specific zoning by-law or alternative planning document that remains registered, as approved by the City of Mississauga.

More details regarding each of the options is summarized below. The options would need to be reviewed with the City of Mississauga to determine the preferred approach. Typically, the entire site is designated as Class 4; however, the municipality can indicate that only specific buildings be designated Class 4, if the predicted sound levels only at those buildings exceed the Class 1 sound level limits.

Option 1

This option would include the use of Class 4 designation and the mitigation of sources associated with the multi-tenant commercial developments as noted in Section 4.2.

Mitigation measures could include:

- enclosure with a roof over the loading areas; and
- a door on the enclosure to allow the trucks to enter, then close the door.

If this option is chosen, discussions will need to be conducted with tenants and owners of the multi-tenant commercial plaza.

Option 2

As the predicted sound levels are greater than the Class 4 sound level limits, the incorporation of the Class 4 designation at the lands (or partial designation) by the City is needed as well as the additional mitigative measures where the Class 4 sound level limits are exceeded; proposed is the use of enclosed noise buffers (ENB) on select façades of the residential buildings.

The MOE in NPC-300 defines “enclosed noise buffer” as the following:

“Enclosed noise buffer”

> means an enclosed area outside the exterior wall of a building such as an enclosed balcony specifically intended to buffer one or more windows of noise sensitive spaces. In order for the concept of enclosed noise buffer to be acceptable within the context of an MOE approval of stationary sources, it can only be implemented on high-rise

multi-unit buildings in a Class 4 area. The characteristics of an enclosed noise buffer are listed below:

- not less than one meter and not more than two meters deep;
- fully enclosed with floor to ceiling glazing or a combination of solid parapet plus glazing above – glazing can potentially be operable to the maximum permitted by the Ontario Building Code;
- separated from interior space with a weatherproof boundary of exterior grade wall, exterior grade window, exterior grade door, or any combination, in compliance with exterior envelope requirements of the Ontario Building Code;
- of sufficient horizontal extent to protect windows of noise sensitive spaces; and
- the architectural design is not amendable to converting the enclosed space to being noise sensitive.

Due to their proximity to the existing commercial buildings, all proposed suites should be provided with a proximity warning clause notifying the purchasers/tenants that the activities and/or equipment associated with the commercial buildings may at times be audible. See Table 3 and Notes to Table 3.

6.0 RECOMMENDATIONS

1. The requirements as stipulated in Table 3 should be incorporated in the development.

2. The mitigation options to address the stationary sources should be reviewed with the City of Mississauga to determine the preferred approach prior to implementation.

3. A detailed environmental noise report should be prepared once the final site plan, architectural plans, mechanical plans and grading plan are available to ensure the appropriate criteria are achieved.

7.0 CONCLUSIONS

Based on the acoustical analysis, with the incorporation of the appropriate acoustical abatement measures, it is feasible to develop these lands for residential use. In accordance with City and Ministry implementation guidelines, where mitigation is required, future purchasers will be advised through the use of warning clauses.

Once details of each building are available, specific mitigation on a per building basis can be determined.

Respectfully submitted,

JADE ACOUSTICS INC.

Per: _____
Michael Bechbache, E.I.T.

Per: _____
Chris B. Kellar P.Eng.

MB/CK/DCG/jg
J:\Reports\18-090 Jun 4-19 91 Eglinton Avenue East.doc

8.0 REFERENCES

1. "Model Municipal Noise Control By-Law", Final Report, by the Ontario Ministry of the Environment, August, 1978.

2. ORNAMENT – "Ontario Road Noise Analysis Method for Environment and Transportation", Ontario Ministry of the Environment, October, 1989.

3. "Building Practice Note No. 56: Controlling Sound Transmission into Buildings'", by J.D. Quirt, Division of Building Research, National Research Council of Canada, September, 1985.

4. "Environmental Noise Guideline Stationary and Transportation Sources – Approval and Planning", Ontario Ministry of the Environment and Climate Change, Publication NPC-300, August, 2013, released October 21, 2013 (updated final version #22).

5. "Impulse Vibration Residential Buildings", Ontario Ministry of Environment, Publication NPC-207 (Draft), November, 1983.

6. Metrolinx Hurontario – Main LRT Project Noise and Vibration Impact Assessment Report – Appendix B.6, prepared by J. E. Coulter Associates Limited, dated June 4, 2014.

7. Metrolinx Hurontario/Main Street LRT Preliminary Engineering and TPAP Plan, Profile and Typical Sections Appendix to Environmental Project Report – Appendix A.1, prepared by SNC Lavalin, dated June 4, 2014.

8. "General Guidelines for the Preparation of Acoustical Reports in the Region of Peel", Region of Peel, November, 2012.

9. "Draft Protocol for Noise and Vibration Assessment for the Proposed Scarborough Rapid Transit Extension", MOEE/TTC, May 11, 1993.

10. "Draft Protocol for Noise and Vibration Assessment for the Proposed Waterfront West Light Rail Transit Line", MOEE/TTC, November 11, 1993

TABLE 1

PROPOSED RESIDENTIAL DEVELOPMENT

91 EGLINTON AVENUE EAST

CITY OF MISSISSAUGA

SUMMARY OF TRAFFIC INFORMATION

A. Road Traffic

ROAD	HURONTARIO STREET	EGLINTON AVENUE EAST	ARMDALE ROAD
AADT* (Ultimate)	38,700	43,200	4,000
No. of Lanes	4	6	2
Speed (km/hr)	60	60	50
Medium Trucks (%)	2.75	1.65	1.10
Heavy Trucks (%)	2.25	1.35	0.90
Gradient (%)	<2	<2	<2
Day/Night Split (%)	90/10	90/10	90/10

* AADT: Annual Average Daily Traffic.

B. Light Rail Traffic

ROAD	HURONTARIO STREET
No. of trains (Daytime 7:00 a.m. to 11:00 p.m.)	560
No. of trains (Nighttime 11:00 p.m. to 7: 00 a.m.)	88
Speed (km/h)	60

C. Aircraft Traffic

Toronto Pearson International Airport NEF/NEP 27 to 28

NEP: 1996 Noise Exposure Projection

NEF: 2000 Noise Exposure Forecast

TABLE 2

PROPOSED RESIDENTIAL DEVELOPMENT

91 EGLINTON AVENUE EAST

CITY OF MISSISSAUGA

PREDICTED UNMITIGATED SOUND LEVELS
OUTDOORS DUE TO ROAD AND LIGHT RAIL TRAFFIC

Building	Location*	Source	Distance (m)	Leq (dBA)			
				Day (7:00 a.m. to 11: 00 p.m.)		Night (11:00 p.m. to 7:00 a.m.)	
				Separate	Combined	Separate	Combined
Building A	Southeast Façade	Eglinton Avenue East	30	68	69	62	62
		Hurontario Street	187	58		52	
		Hurontario LRT	187	51		46	
Buildings A & B	Third Storey Podium	Eglinton Avenue East	31	49	--	--	--
Building D	Southeast Corner	Eglinton Avenue East	88	57	58	51	52
		Hurontario Street	297	51		44	
		Hurontario LRT	297	44		39	
	Fifth Storey Podium	Armdale Road	22	41	--	--	--
Building E	Southwest Façade	Eglinton Avenue East	93	61	63	54	57
		Hurontario Street	183	58		52	
		Hurontario LRT	183	52		47	
	Third Storey Podium	Hurontario Street	187	57	59	--	--
		Armdale Road	29	52		--	
		Hurontario LRT	187	50		--	
Building G	Ninth Storey Podium	Eglinton Avenue East	41	46	--	--	--
	Thirteenth Storey Podium	Eglinton Avenue East	111	45	--	--	--
Building H1	Southeast Façade	Eglinton Avenue East	75	58	--	50	--
	Rear Yard	Eglinton Avenue East	80	48	--	--	--

* Wall receiver is top residential storey. The rooftop terrace receiver is located at a height of 1.5 m above the terrace.

TABLE 3

PROPOSED RESIDENTIAL DEVELOPMENT

91 EGLINTON AVENUE EAST

CITY OF MISSISSAUGA

SUMMARY OF MINIMUM NOISE ABATEMENT MEASURES
DUE TO TRANSPORTATION NOISE SOURCES

Buildings (Suites)	Air Conditioning (1)	Exterior Wall STC Rating (2)	Window STC Rating (3)	Sound Barrier (4)	Warning Clause (5)
All buildings (suites)	Mandatory*	Up to STC 39**	Up to STC 36**	No***	A, B, C, D#
All townhouse (units)	Mandatory	Standard	Standard	No	A, B, C, D#

* See Section 5.1.2 for details. Dwelling designs are anticipated to include central air conditioning. Mandatory central air conditioning would be required since Class 4 is required.

** Denotes construction that exceeds minimum structural and safety requirements of standard construction to address transportation sources.

*** See Section 5.1.2 for details regarding sound barriers for outdoor amenity spaces.

Warning clause “D” will be needed if the development is designated as Class 4.

See Notes to Table 3 on following pages. See Section 5.2 for discussions regarding noise mitigation measures required to address stationary noise sources.

NOTES TO TABLE 3

1. Means must be provided to allow windows to remain closed for noise control purposes.

2. STC – Sound Transmission Class Rating (Reference ASTM-E413). Values shown are based on preliminary calculations using standard assumptions. See text for details.

3. STC – Sound Transmission Class Rating (Reference ASTM-E413). Values shown are based on preliminary calculations using standard assumptions. See text for details.
   A sliding glass walkout door should be considered as a window and be included in the percentage of glazing. Requirements are to be finalized once building plans are available.

4. Suggested warning clauses to be included in the development agreement and to be included in offers of purchase and sale or lease agreements on designated buildings (suites):

   A. "Purchasers/tenants are advised that despite the inclusion of noise control features in this development area and within the dwelling units, noise due to increasing road traffic may continue to be of concern, occasionally interfering with the activities of the occupants as the sound level may exceed the noise criteria of the Municipality and the Ontario Ministry of the Environment, Conservation and Parks. I, the purchaser hereby agree to place this clause in all subsequent offers of purchase and sale when I sell the property."

   B. "Purchasers/tenants are advised that the dwelling unit was fitted with a central air conditioning system in order to permit closing of windows for noise control."

   C. "Purchasers/tenants are advised that this residential unit is in proximity to the existing commercial buildings whose activities may at times be audible."

   D. "Purchasers/tenants are advised that sound levels due to the adjacent commercial buildings are required to comply with sound level limits that are protective of indoor areas and are based on the assumption that windows and exterior doors are closed. This dwelling unit has been supplied with a central air conditioning system which will allow windows and exterior doors to remain closed. The residential area has been designated Class 4 as defined by the Ministry of the Environment, Conservation and Parks guidelines."

N.T.S

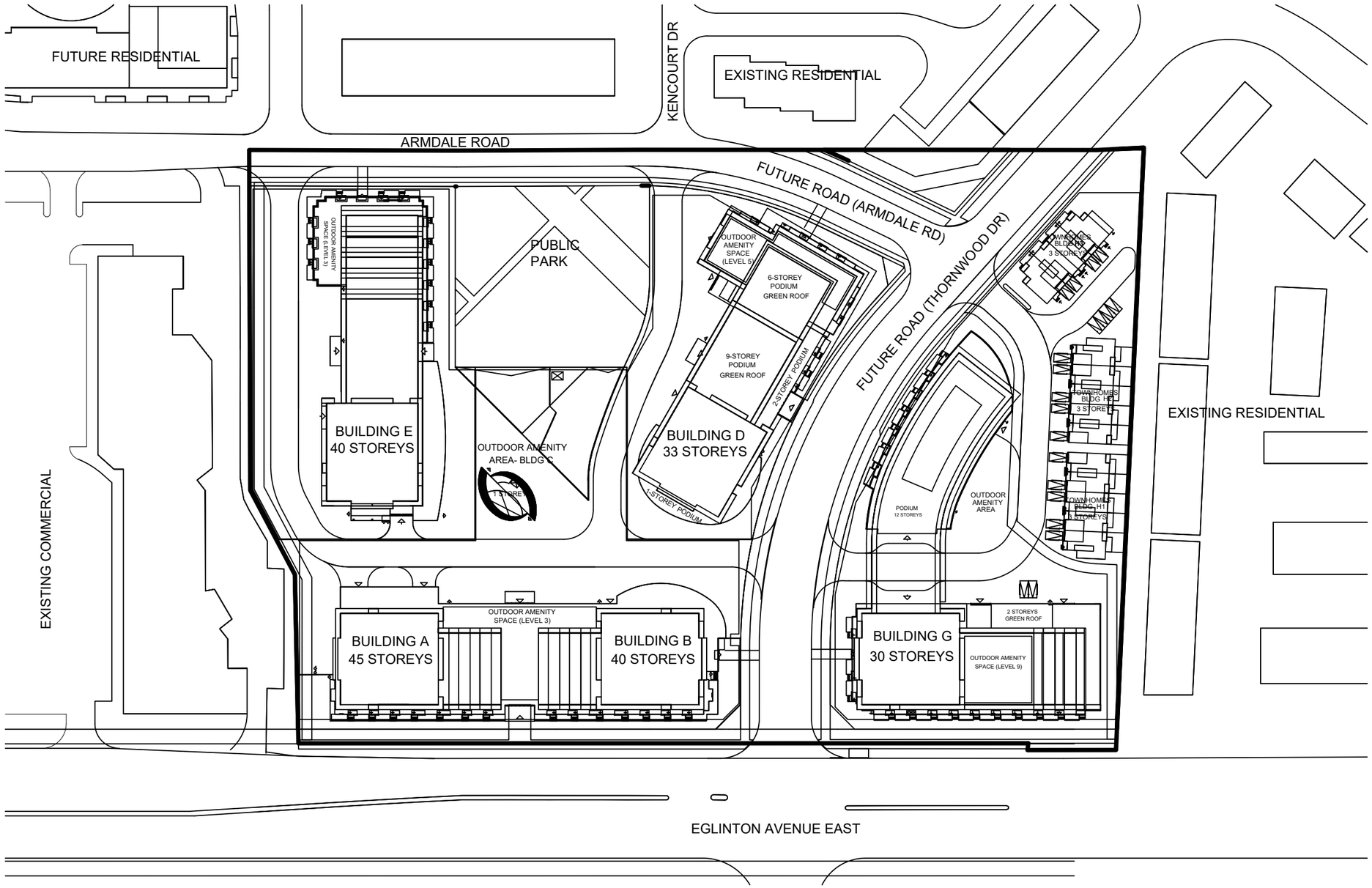
Proposed Residential Development
91 Eglinton Avenue East
City of Mississauga

KEY PLAN

FIGURE 1

Date: June 2019 **File: 18-090**

JADE ACOUSTICS



NOTES:

Mandatory Central Air Conditioning and Warning Clause Required for All Buildings (See Text, Table 3 and Notes to Table 3)

N.T.S.

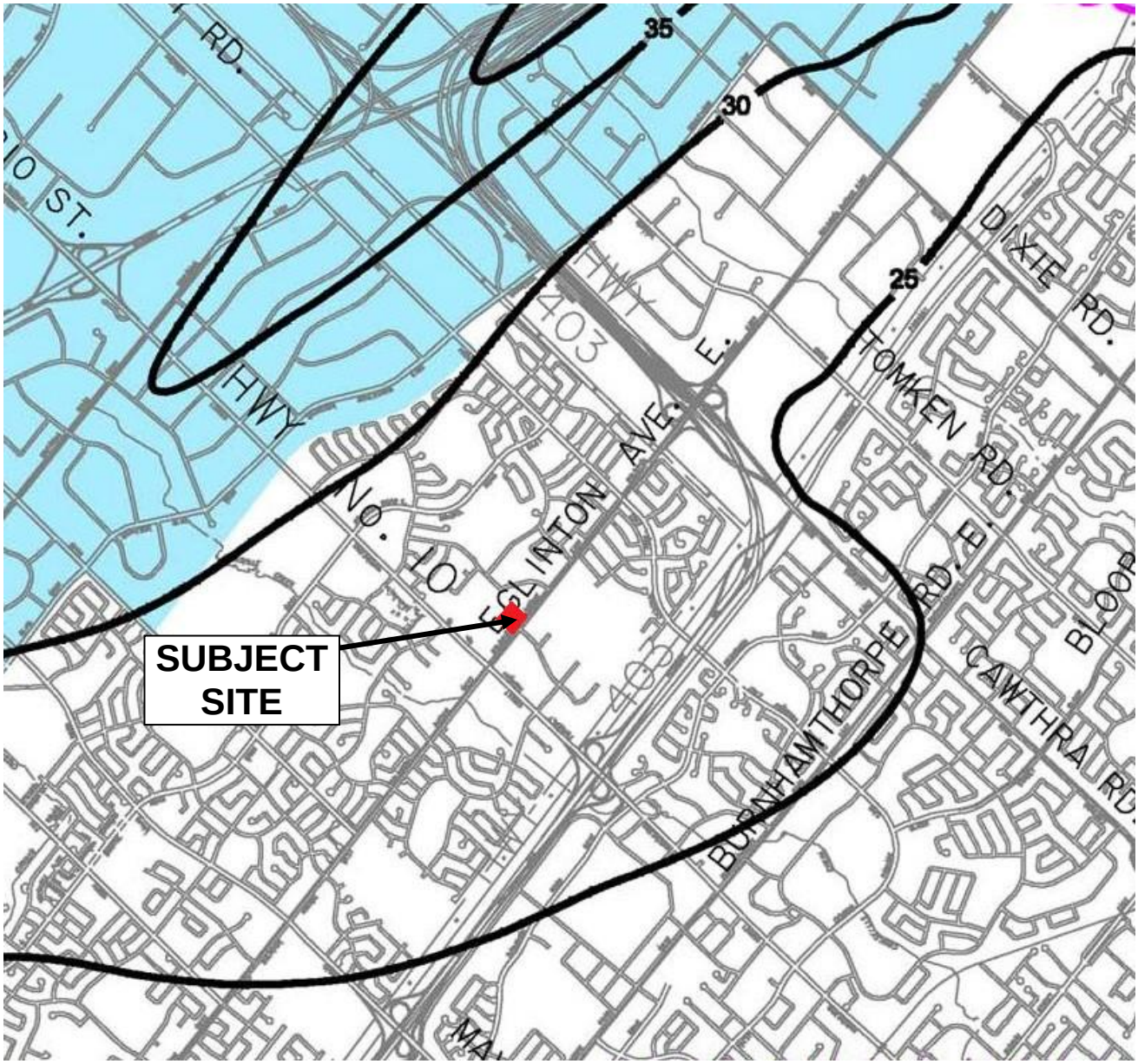
Proposed Residential Development
91 Eglinton Avenue East
City of Mississauga

Date: June 2019 Our File: 18-090

JADE ACOUSTICS

PLAN OF DEVELOPMENT

Figure 2



N.T.S

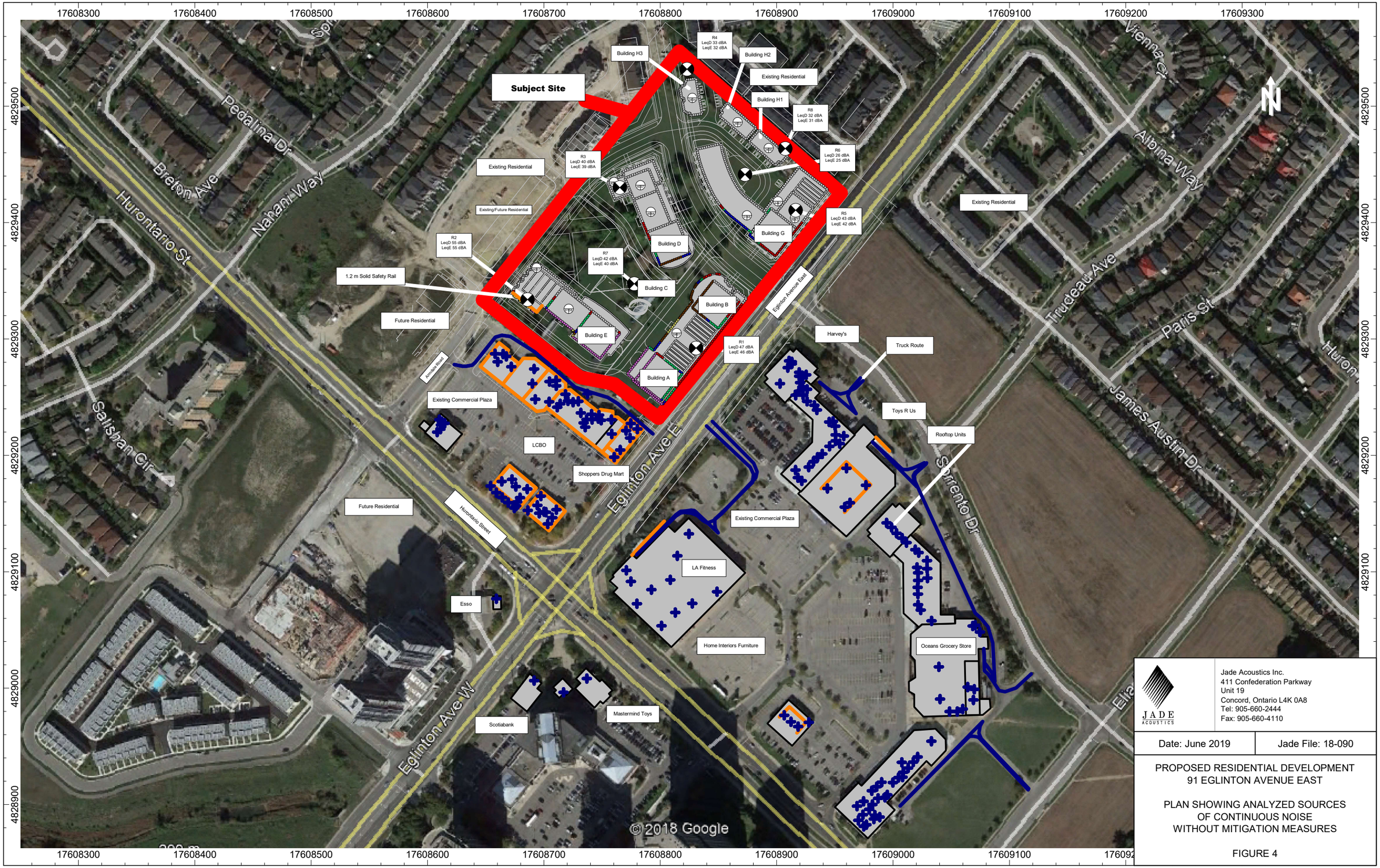
Proposed Residential Development
91 Eglinton Avenue East
City of Mississauga

Date: June 2019 **File: 18-090**

TORONTO PEARSON INTERNATIONAL AIRPORT COMPOSITE NEF/NEP CONTOUR MAP

FIGURE 3

JADE ACOUSTICS



JADE ACOUSTICS

Jade Acoustics Inc.
411 Confederation Parkway
Unit 19
Concord, Ontario L4K 0A8
Tel: 905-660-2444
Fax: 905-660-4110

Date: June 2019 | Jade File: 18-090

PROPOSED RESIDENTIAL DEVELOPMENT
91 EGLINTON AVENUE EAST

PLAN SHOWING ANALYZED SOURCES
OF CONTINUOUS NOISE
WITHOUT MITIGATION MEASURES

FIGURE 4

JADE ACOUSTICS

Jade Acoustics Inc.
411 Confederation Parkway
Unit 19
Concord, Ontario L4K 0A8
Tel: 905-660-2444
Fax: 905-660-4110

Date: June 2019 | Jade File: 18-090

PROPOSED RESIDENTIAL DEVELOPMENT
91 EGLINTON AVENUE EAST

PLAN SHOWING UNMITIGATED
PREDICTED SOUND LEVELS
AT BUILDING FACADES

FIGURE 5

APPENDIX A

CORRESPONDENCE REGARDING TRAFFIC DATA

Date:	19-Apr-01

NOISE REPORT FOR PROPOSED DEVELOPMENT

REQUESTED BY:

Name:	Michael Bechbache
Company	Jade Acoustic Inc

PREPARED BY:

Name:	Bertuen Mickle
Tel#:	(905) 615-3200

Location:	- Horontario Street, between Eglinton Ave. and Nahani way -Eglinton Ave. East of Hurontario Street -Nahani way E of Hurontario; And -Armdale Rd E of Hurontario St.
ID#:	414

ON SITE TRAFFIC DATA

Specific	***Street Names***				
	Hurontario Street	Eglinton Avenue	Nahani Way	Armdale Road	
AADT:	38,700	43,200	4,000	4,000	
# of Lanes:	4 Lanes	6 Lanes	2 Lanes	2 Lanes	
% Trucks:	5%	3%	2%	2%	
Medium/Heavy Trucks Ratio:	55/45	55/45	55/45	55/45	
Day/Night Traffic Split:	90/10	90/10	90/10	90/10	
Posted Speed Limit:	60 km/h	60 km/h	50 km/h	50 km/h	
Gradient of Road:	< 2%	< 2%	< 2%	< 2%	
Ultimate R O W:	45m	45m	22m	24m	

Comments:

-Ultimate Traffic only

-Ultimate data is based on the proposed LRT project along Hurontario street with existing lanes converted from 6 to 4 lanes with 2 LRT lines in the middle/both sides.

-Please contact Farad Shala @(905) 615-3200 ext. 3377 or farhad.shala@mississauga.ca

Michael Bechbache

From: Matthew Williams <Matthew.Williams@mississauga.ca>
Sent: Thursday, March 28, 2019 9:20 AM
To: Michael Bechbache
Cc: Rob Dolezel
Subject: RE: Request for Hurontario LRT Information (JAI Job #19-039)

Michael,

The Hurontario LRT project is still going through the Metrolinx procurement process and what is provided on the web site from the previous Environmental Project Report is still the last available public information. The system remains a centre running alignment as shown in the preliminary design information (http://www.metrolinx.com/en/docs/pdf/hurontario_epr/Appendix_A1_LRT_Infrastructure_Design.pdf). The successful proponent team from the procurement process will be responsible for completing the design and constructing the infrastructure.

Matthew Williams
Planning Lead, HLRT Project
T 905-615-3200 ext.5834
matthew.williams@mississauga.ca

City of Mississauga | Transportation and Works Department,
LRT Project Office

From: Michael Bechbache [mailto:michael@jadeacoustics.com]
Sent: 2019/03/27 5:02 PM
To: Matthew Williams
Cc: Chris Kellar
Subject: Request for Hurontario LRT Information (JAI Job #19-039)

Hi Matthew,

We are working on preparing a noise and vibration report for a site east of Hurontario Street, north of Eglinton Avenue in the City of Mississauga. In preparation of this report we will be investigating the future Hurontario LRT. Can you please advise if the June 4, 2019 Noise and Vibration Impact Assessment Report prepared by J.E. Coulter Associates Limited is the most recent study prepared for this project? This report was found on the Metrolinx website (http://www.metrolinx.com/en/docs/pdf/hurontario_epr/Appendix_B6_Noise_and_Vibration_Impact_Assessment_Report.pdf). Should this not be the most current report, kindly provide details on how we may obtain the most up to date information.

Further to this, if available, please provide information regarding the track location/orientation, specifically for the area between Eglinton Avenue and Bristol Road.

Thank you in advance for your time and efforts.

Regards,

Mike Bechbache, E.I.T.
Jade Acoustics Inc.
michael@jadeacoustics.com
T: 905-660-2444
F: 905-660-4110

Michael Bechbache

From: Matthew Williams <Matthew.Williams@mississauga.ca>
Sent: Wednesday, April 10, 2019 3:47 PM
To: Michael Bechbache
Subject: RE: Request for Hurontario LRT Information (JAI Job #19-039)

We have very little additional information currently available as we are still the procurement process. Metrolinx anticipates the procurement will be ready for award in the Fall and the successful proponent will have to assess and determine the noise mitigation requirements.

Matthew Williams
Planning Lead, HLRT Project
T 905-615-3200 ext.5834
matthew.williams@mississauga.ca

City of Mississauga | Transportation and Works Department,
LRT Project Office

From: Michael Bechbache [mailto:michael@jadeacoustics.com]
Sent: 2019/04/10 11:41 AM
To: Matthew Williams
Cc: Chris Kellar
Subject: RE: Request for Hurontario LRT Information (JAI Job #19-039)

Hi Matthew,

Thank you for providing the response below.

In my review of the 2014 Noise and Vibration Impact Assessment (Appendix B.6), I note there are different levels of track isolation proposed along the length of the LRT corridor to address ground-borne vibration. Is there any known intention or direction at this time as to what isolation method/system will be implemented in particular sections of track (or as a global minimum)? I am specifically interested in the section north of Highway 403, to Bristol Road.

Thank you in advance.

Regards,

Mike Bechbache, E.I.T.
Jade Acoustics Inc.
michael@jadeacoustics.com
T: 905-660-2444

F: 905-660-4110

From: Matthew Williams [mailto:Matthew.Williams@mississauga.ca]
Sent: Thursday, March 28, 2019 9:20 AM
To: Michael Bechbache <michael@jadeacoustics.com>
Cc: Rob Dolezel <Rob.Dolezel@metrolinx.com>
Subject: RE: Request for Hurontario LRT Information (JAI Job #19-039)

Michael,

The Hurontario LRT project is still going through the Metrolinx procurement process and what is provided on the web site from the previous Environmental Project Report is still the last available public information. The system remains a centre running alignment as shown in the preliminary design information (http://www.metrolinx.com/en/docs/pdf/hurontario_epr/Appendix_A1_LRT_Infrastructure_Design.pdf). The successful proponent team from the procurement process will be responsible for completing the design and constructing the infrastructure.

Matthew Williams
Planning Lead, HLRT Project
T 905-615-3200 ext.5834
matthew.williams@mississauga.ca

City of Mississauga | Transportation and Works Department,
LRT Project Office

From: Michael Bechbache [mailto:michael@jadeacoustics.com]
Sent: 2019/03/27 5:02 PM
To: Matthew Williams
Cc: Chris Kellar
Subject: Request for Hurontario LRT Information (JAI Job #19-039)

Hi Matthew,

We are working on preparing a noise and vibration report for a site east of Hurontario Street, north of Eglinton Avenue in the City of Mississauga. In preparation of this report we will be investigating the future Hurontario LRT. Can you please advise if the June 4, 2019 Noise and Vibration Impact Assessment Report prepared by J.E. Coulter Associates Limited is the most recent study prepared for this project? This report was found on the Metrolinx website (http://www.metrolinx.com/en/docs/pdf/hurontario_epr/Appendix_B6_Noise_and_Vibration_Impact_Assessment_Re

port.pdf). Should this not be the most current report, kindly provide details on how we may obtain the most up to date information.

Further to this, if available, please provide information regarding the track location/orientation, specifically for the area between Eglinton Avenue and Bristol Road.

Thank you in advance for your time and efforts.

Regards,

Mike Bechbache, E.I.T.
Jade Acoustics Inc.
michael@jadeacoustics.com
T: 905-660-2444
F: 905-660-4110

APPENDIX B

ENVIRONMENTAL NOISE CRITERIA

ONTARIO MINISTRY OF THE ENVIRONMENT (MOE)

Reference: "Environmental Noise Guidelines Stationary and Transportation Sources – Approval and Planning", Publication NPC-300, August, 2013, released October 21, 2013 (updated final version # 22).

SOUND LEVEL CRITERIA FOR ROAD AND RAIL NOISE

TABLE C-1

Sound Level Limit for Outdoor Living Areas

Road and Rail

Time Period	L_{eq} (16) (dBA)
16 hr, 07:00 - 23:00	55

TABLE C-2

Indoor Sound Level Limits
Road and Rail

Type of Space	Time Period	L_{eq} (dBA)	
		Road	Rail
Living/dining, den areas of residences, hospitals, nursing homes, schools, daycare centres, etc.	07:00 – 23:00	45	40
Living/dining, den areas of residences, hospitals, nursing homes, etc. (except schools or daycare centres)	23:00 – 07:00	45	40
Sleeping quarters	07:00 – 23:00	45	40
	23:00 – 07:00	40	35

SOUND LEVEL CRITERIA FOR AIRCRAFT NOISE

TABLE C-3

Outdoor Aircraft Noise Limit

Time Period	NEF/NEP
24-hour	30

TABLE C-4

Indoor Aircraft Noise Limit
(Applicable over 24-hour period)

Type of Space	Indoor NEF/NEP*
Living/dining/den areas of residences, hospitals, nursing/retirement homes, schools, daycare centres, etc.	5
Sleeping Quarters	0

* The indoor NEF/NEP values in Table C-4 are used to determine acoustical insulation requirements based on the NEF/NEP contour maps.

SOUND LEVEL CRITERIA FOR STATIONARY SOURCES

TABLE C-5

Exclusion Limit Values of One-Hour Equivalent Sound Level (L_{eq}, dBA)
Outdoor Points of Reception

Time of Day	Class 1 Area	Class 2 Area	Class 3 Area	Class 4 Area
07:00 – 19:00	50	50	45	55
19:00 – 23:00	50	45	40	55

TABLE C-6

Exclusion Limit Values of One-Hour Equivalent Sound Level (L_{eq}, dBA)
Plane of Window of Noise Sensitive Spaces

Time of Day	Class 1 Area	Class 2 Area	Class 3 Area	Class 4 Area
07:00 – 19:00	50	50	45	60
19:00 – 23:00	50	50	40	60
23:00 – 07:00	45	45	40	55

TABLE C-7

Exclusion Limit Values for Impulsive Sound Level (L_{LM}, dBAI)
Outdoor Points of Reception

Time of Day	Actual Number of Impulses in Period of One-Hour	Class 1 Area	Class 2 Area	Class 3 Area	Class 4 Area
07:00 – 23:00	9 or more	50	50	45	55
	7 to 8	55	55	50	60
	5 to 6	60	60	55	65
	4	65	65	60	70
	3	70	70	65	75
	2	75	75	70	80
	1	80	80	75	85

TABLE C-8

Exclusion Limit Values of Impulsive Sound Level (L_{LM}, dBAI)
Plane of Window - Noise Sensitive Spaces (Day/Night)

Actual Number of Impulses in Period of One-Hour	Class 1 Area (07:00-23:00) / (23:00-07:00)	Class 2 Area (07:00-23:00) / (23:00-07:00)	Class 3 Area (07:00-19:00) / (19:00-07:00)	Class 4 Area (07:00-23:00) / (23:00-07:00)
9 or more	50/45	50/45	45/40	60/55
7 to 8	55/50	55/50	50/45	65/60
5 to 6	60/55	60/55	55/50	70/65
4	65/60	65/60	60/55	75/70
3	70/65	70/65	65/60	80/75
2	75/70	75/70	70/65	85/80
1	80/75	80/75	75/70	90/85

SUPPLEMENTARY SOUND LEVEL LIMITS

Indoor limits for transportation sources applicable to noise sensitive land uses are specified in Table C-2 and Table C-4. Table C-9 and Table C-10 are expanded versions of Table C-2 and Table C-4, and present guidelines for acceptable indoor sound levels that are extended to land uses and developments which are not normally considered noise sensitive. The specified values are maximum sound levels and apply to the indicated indoor spaces with the windows and doors closed. The sound level limits in Table C-9 and Table C-10 are presented as information, for good-practice design objectives.

TABLE C-9

Supplementary Indoor Sound Level Limits
Road and Rail

Type of Space	Time Period	L_{eq} (Time Period) (dBA)	
		Road	Rail
General offices, reception areas, retail stores, etc.	16 hours between 07:00 – 23:00	50	45
Living/dining areas of residences, hospitals, schools, nursing/retirement homes, daycare centres, theatres, places of worship, libraries, individual or semi-private offices, conference rooms, reading rooms, etc.	16 hours between 07:00 – 23:00	45	40
Sleeping quarters of hotels/motels	8 hours between 23:00 – 07:00	45	40
Sleeping quarters of residences, hospitals, nursing/retirement homes, etc.	8 hours between 23:00 – 07:00	40	35

TABLE C-10

Supplementary Indoor Aircraft Noise Limit
(Applicable over 24-hour period)

Type of Space	Indoor NEF/NEP*
General offices, reception areas, retail stores, etc.	15
Individual or semi-private offices, conference rooms, etc.	10
Living/dining areas of residences, sleeping quarters of hotels/motels, theatres, libraries, schools, daycare centres, places of worship, etc.	5
Sleeping quarters of residences, hospitals, nursing/retirement homes, etc.	0

* The indoor NEF/NEP values in Table C-10 are not obtained from NEF/NEP contour maps. The values are representative of the indoor sound levels and are used as assessment criteria for the evaluation of acoustical insulation requirements.

ENVIRONMENTAL NOISE CRITERIA

REGION OF PEEL

Reference: "General Guidelines for the Preparation of Acoustical Reports in the Region of Peel", November, 2012.

ROAD TRAFFIC NOISE

TYPE OF SPACE	TIME PERIOD	SOUND LEVEL LIMIT Leq*
Outdoor living area	7:00 a.m. – 11:00 p.m.	Leq (16 hr) = 55 dBA
Outside bedroom window	11:00 p.m. – 7:00 a.m.	Leq (8 hr) = 50 dBA
Indoor (bedrooms, hospitals)	11:00 p.m. – 7:00 a.m.	Leq (8 hr) = 40 dBA
Indoor (living rooms, hotels, private offices, reading rooms)	7:00 a.m. – 11:00 p.m.	Leq (16 hr) = 45 dBA
Indoor (general offices, shops)	7:00 a.m. – 11:00 p.m.	Leq (16 hr) = 50 dBA

* Leq, measured in A-weighted decibels (dBA), is the value of the constant sound level which would result in exposure to the same total sound level as would the specified time varying sound, if the constant sound level persisted over an equal time interval.

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MOEE/TTC
DRAFT
PROTOCOL FOR NOISE AND VIBRATION ASSESSMENT FOR THE PROPOSED SCARBOROUGH RAPID TRANSIT EXTENSION

May 11, 1993

TABLE OF CONTENTS

PROTOCOL FOR NOISE AND VIBRATION ASSESSMENT

PART A. PURPOSE

The Toronto Transit Commission (TTC) and the Ministry of the Environment and Energy (MOEE) recognize that transit facilities produce noise and vibration which may affect neighbouring properties within urbanized areas. This document identifies the framework within which criteria will be applied for limiting wayside air-borne noise and ground-borne noise and vibration from the TTC's proposed Scarborough Rapid Transit Line Extension (the "Line"). This proposed extension is to run from McCowan station to Markham Road and Sheppard Avenue East. The framework presented in this document is to be applied for planning purposes in order to address the requirements of the Environmental Assessment Act and is to be utilized during implementation of the Line.

The passby sound levels and vibration velocities in this protocol have been developed specifically for the Line and this protocol is not to be applied retroactively to existing TTC transit Lines, routes or facilities, including the existing SRT line, nor to transit authorities other than TTC. Further, the criteria specified for this project are not precedent setting for future projects.

Prediction and measurement methods are being developed by the TTC. This will be done in consultation with MOEE and the Ministry of Transportation (MTO). Studies pertaining to noise and vibration levels are also being conducted by TTC. Upon completion of these studies, the TTC may revisit the assessment criteria and methods in this protocol to modify them as required in consultation with MOEE and the Ministry of Transportation (MTO).

PART B. GENERAL

During design of the Line, predicted wayside sound levels and vibration velocities are to be compared to criteria given in this protocol. This will permit an impact assessment and help determine the type or extent of mitigation measures to reduce that impact. Sound levels and vibration velocities will be predicted from sound levels and velocities of TTC's existing rail technologies.

The criteria presented in this document are based on good operating conditions and the impact assessment assumes this condition. Good operating conditions exist when well maintained vehicles operate on well maintained continuous welded rail without significant rail corrugation. It is recognised that wheel flats or rail corrugations will inevitably occur and will temporarily increase sound and vibration levels until they are corrected. Levels in this protocol do not reflect these occasional events, nor do they apply to maintenance activities on the Line. TTC recognizes that wheel rail squeal is a potential source of noise which may pose a concern to the community. TTC is investigating and will continue to investigate measures to mitigate wheel rail squeal and will endeavour to mitigate this noise source. TTC endeavours to minimize the noise and vibration impacts associated with its transit operations and is committed to providing good operating conditions to the extent technologically, economically and administratively feasible.

It is recognised that levels of sound and vibration at special trackwork, such as at crossovers and turnouts, are inevitably higher than along tangent track. Also, there is a limit to the degree of mitigation that is feasible at special trackwork areas. This is to be taken into account in predicting sound and vibration levels near these features and in applying the levels in this protocol. Special trackwork, such as at crossovers and turnouts, is encompassed within the framework of this document.

This protocol applies to existing and proposed residential development having municipal approval on the date of this protocol. The protocol also applies to existing and municipally approved proposed nursing homes, group homes, hospitals and other such institutional land uses where people reside. This protocol does not apply to commercial and industrial land uses.

This protocol does not apply closer than 15 m to the centreLine of the nearest track. Any such cases shall be assessed on a case by case basis.

Part D of this document deals with airborne noise from the Line and its construction. Part E deals with groundborne noise and vibration from the Line.

PART C. DEFINITIONS

The following definitions apply to both parts D and E of this document.

Ancillary Facilities:

Subsidiary locations associated with either the housing of personnel or equipment engaged in TTC activities or associated with mainLine revenue operations. Examples of ancillary facilities include, but are not limited to, subway stations, bus terminals, emergency services buildings, fans, fan and vent shafts, substations, mechanical equipment plants, maintenance and storage facilities, and vehicle storage and maintenance facilities.

Passby Time Interval:

The passby time interval of a vehicle or train is given by its total length and its speed. The start of the pass-by is defined as that point in time when the leading wheels pass a reference point. The end of the pass-by is defined as that point in time when the last wheels of the vehicle or train pass the same reference point. The reference point is to be chosen to give the highest level at the point of reception or point of assessment, i.e. usually at the point of closest approach. From a signal processing perspective, the passby time interval will be defined in the prediction and measurement methods being developed.

PART D. AIR BORNE NOISE

1.0 DEFINITIONS

The following definitions are to be used only within the context of Part D of this document.

Ambient:

The ambient is the sound existing at the point of reception in the absence of all noise from the Line. In this protocol the ambient is taken to be the noise from road traffic and existing industry. The ambient specifically excludes transient noise from aircraft and railways, except for pre-existing TTC rail operations.

Daytime Equivalent Sound Level:

$L_{eq,16h}$ is the daytime equivalent sound level. The definition of equivalent sound level is provided in Reference 2. The applicable time period is from 07:00 to 23:00 hours.

Nighttime Equivalent Sound Level:

$L_{eq,8h}$ is the nighttime equivalent sound level. The applicable time period is from 23:00 to 07:00 hours.

Point of Reception:

Daytime: 07:00 - 23:00 hours

Any outdoor point on residential property, 15 m or more from the nearest track's centreLine, where sound originating from the Line is received.

Nighttime: 23:00 - 07:00 hours

The plane of any bedroom window, 15 m or more from the nearest track's centreLine, where sound originating from the Line is received. At the planning stage, this is usually assessed at the nearest facade of the premises.

Passby Sound Level, L_{passby} :

Within the context of this document, the passby sound level is defined as the A-weighted equivalent sound level, L_{eq} [Reference 2] over the passby time interval.

2.0 RAIL TRANSIT

In the assessment of noise impact, rail transit is considered to include the movement of trains between stations, the movement and idling of trains inside stations as well as the movement of trains between the mainline and ancillary facilities. Ancillary facilities are not considered part of the rail transit and are assessed as stationary

sources. Trains idling in maintenance yards and storage facilitities are part of the stationary source.

The assessment of noise impact resulting from Line is to be performed in terms of the following sound level descriptors:

1) Daytime equivalent sound level, $L_{eq\ 16h}$,
2) Nighttime equivalent sound level, $L_{eq,8h}$,
3) Passby Sound Level, L_{passby}.

The predicted daytime and nighttime equivalent sound levels include the effects of both passby sound level and frequency of operation and are used to assess the noise impact of the Line. The Passby Sound Level criterion is used to assess the sound levels received during a single train passby. The criteria and methods to be used are discussed in Sections 2.1 and 2.2.

2.1 Criteria

Noise impact shall be predicted and assessed during design of the Line using the following sound level criteria:

DAYTIME EQUIVALENT SOUND LEVEL:

The limit at a point of reception for the predicted daytime equivalent sound levels for rail transit operating alone (excluding contributions from the ambient) is 55 dBA or the ambient $L_{eq\ 16h}$, whichever is higher.

NIGHTTIME EQUIVALENT SOUND LEVEL:

The limit at a point of reception for the predicted nighttime equivalent sound levels for rail transit operating alone (excluding contributions from the ambient) is 50 dBA or the ambient $L_{eq,8h}$, whichever is higher.

PASSBY SOUND LEVEL:

The limit at a point of reception for predicted L_{passby} for a single train operating alone and excluding contributions from other sources is 80 dBA. This limit is based on vehicles operating on tangent track. It does not apply within 100m of special trackwork and excludes wheel rail squeal.

Mitigating measures will be incorporated in the design of the Line when predictions show that any of the above limits are exceeded by more than 5 dB. All mitigating measures shall ensure that the predicted sound levels are as close to, or lower than, the respective limits as is technologically, economically, and administratively feasible.

2.2 Prediction

In most cases, a reasonable estimate of the ambient sound level can be made using a road traffic noise prediction method such as that described in Reference 9, and the minimum sound levels in Table 106-2 of Reference 6. Prediction of road traffic L_{eq} is preferred to individual measurements in establishing the ambient. Prediction techniques for the L_{eq} from road traffic and the L_{eq} or L_{passby} from transit shall be compatible with one another. Any impact assessment following this protocol shall include a description of the prediction method and the assumptions and sound level data inherent in it. Prediction and measurement methods compatible with MOEE guidelines and procedures are being developed by the TTC at the date of this protocol in consultation with MTO and MOEE.

3.0 ANCILLARY FACILITIES

Predicted noise impacts from ancillary facilities shall be assessed during the design of the Line in accordance with the stationary source guideLines detailed in Reference 5. The predictions used shall be compatible with and at least as accurate as CSA Standard Z107.55.

4.0 BUSES IN MIXED TRAFFIC

Where buses are part of the road traffic there are no additional criteria requirements beyond those presented in the Ministry of Transportation of Ontario Protocol for dealing with noise concerns during the preparation, review and evaluation of Provincial Highways Environmental Assessments (Reference 1). Buses should be considered as medium trucks in the traffic noise prediction models.

5.0 CONSTRUCTION

Noise impacts from the construction of the Line are to be examined. For the purposes of impact assessment and identifying the need for mitigation, the Ministry of the Environment and Energy guideLines for construction presented in Reference 7 are to be referred to.

PART E. GROUND-BORNE VIBRATION

The assessment of ground-borne vibration impact is confined to the vibration that is produced by the operation of the Line and excludes vibration due to maintenance activities.

In recognition of the fact that the actual vibration response of a building is affected by its own structural characteristics, this document deals with the assessment of ground borne vibration only on the outside premises. Structural characteristics of buildings are beyond the scope of this protocol and beyond the control of the TTC.

1.0 DEFINITIONS

The following definitions are to be used only within the context of Part E of this document.

Point of Assessment:

A point of assessment is any outdoor point on residential property, 15 m or more from the nearest track's centreLine, where vibration originating from the Line is received.

Vibration Velocity:

Vibration Velocity is the root-mean-square (rms) vibration velocity assessed during a train pass-by. The unit of measure is metres per second (m/s) or millimetres per second (mm/s). For the purposes of this protocol only vertical vibration is assessed. The vertical component of transit vibration is usually higher than the horizontal. Human sensitivity to horizontal vibration at the frequencies of interest is significantly less than the sensitivity to vertical vibration.

2.0 VIBRATION ASSESSMENT

Vibration velocities at points of assessment shall be predicted during design of the Line. If the predicted rms vertical vibration velocity from the Line exceeds 0.1 mm/sec, mitigation methods shall be applied during the detailed design to meet this criterion to the extent technologically, economically, and administratively feasible.

Any impact assessment following this protocol shall include a description of the prediction method and the assumptions and data inherent in it. Prediction and measurement methods are being developed by the TTC at the date of this protocol in cooperation with MTO and MOEE.

References

1)A Protocol for Dealing With Noise Concerns During the Preparation, Review and Evaluation of Provincial Highways Environmental Assessments, Ministry of Transportation, February 1986.

2)Model Municipal Noise Control By-Law, Final Report, Publication NPC-101 Technical Definitions, Ministry of the Environment, August 1978.

3)Model Municipal Noise Control By-Law, Final Report, Publication NPC-103 Procedures, Ministry of the Environment, August 1978.

4)Model Municipal Noise Control By-Law, Final Report, Publication NPC-104 Sound Level Adjustments, Ministry of the Environment, August 1978.

5)Model Municipal Noise Control By-Law, Final Report, Publication NPC-105 Stationary Sources, Ministry of the Environment, August 1978.

6)Model Municipal Noise Control By-Law, Final Report, Publication NPC-106 Sound Levels of Road Traffic, Ministry of the Environment, August 1978.

7)Noise Control GuideLine For Class Environmental Assessment of Undertakings, February 1980, Ministry of the Environment.

8)Toronto Subway System Track Vibration Isolation System (Double Tie) - Technical Report, TTC Engineering Department, June 1982.

9)STAMSON 4.1, Ontario Ministry of the Environment Road and Rail Noise Prediction Software

MOEE/TTC

DRAFT

PROTOCOL FOR NOISE AND VIBRATION ASSESSMENT FOR THE PROPOSED WATERFRONT WEST LIGHT RAIL TRANSIT LINE

November 11, 1993

DRAFT

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PROTOCOL FOR NOISE AND VIBRATION ASSESSMENT

PART A. PURPOSE

The Toronto Transit Commission (TTC) and the Ministry of the Environment and Energy (MOEE) recognise that transit facilities produce noise and vibration which may affect neighbouring properties within urbanised areas. This document identifies the framework within which criteria will be applied for limiting wayside air-borne noise, ground-borne noise and vibration from the TTC's proposed Waterfront West Light Rail Transit Line (the "Line"). The proposed line is to run from Spadina and Queen's Quay West to the CNE Dufferin Street Gate and from the Humber Loop to Legion Road. The framework presented in this document is to be applied for planning purposes in order to address the requirements of the Environmental Assessment Act and is to be utilized during implementation of the Line.

The passby sound levels and vibration velocities in this protocol have been developed specifically for the Line and this protocol is not to be applied retroactively to existing TTC transit lines, routes or facilities, including the existing lines with which this line will intersect, nor to transit authorities other than TTC. Further, the criteria specified for this project are not precedent setting for future projects.

Prediction and measurement methods are being developed by the TTC. This will be done in consultation with MOEE and the Ministry of Transportation (MTO). Studies pertaining to noise and vibration levels are also being conducted by TTC. Upon completion of these studies, the TTC may revisit the assessment criteria and methods in this protocol to modify them as required in consultation with MOEE and the Ministry of Transportation (MTO).

PART B. GENERAL

During design of the Line, predicted wayside sound levels and vibration velocities are to be compared to criteria given in this protocol. This will permit an impact assessment and help determine the type or extent of mitigation measures to reduce that impact. Sound levels and vibration velocities will be predicted from sound levels and velocities of TTC's existing rail technologies.

The criteria presented in this document are based on good operating conditions and the impact assessment assumes this condition. Good operating conditions exist when well maintained vehicles operate on well maintained continuous welded rail without significant rail corrugation. It is recognised that wheel flats or rail corrugations will inevitably occur and will temporarily increase sound and vibration levels until they are corrected. Levels in this protocol do not reflect these occasional events, nor do they apply to maintenance activities on the Line. TTC recognizes that wheel rail squeal is a potential source of noise which may pose a concern to the community. TTC is investigating and will continue to investigate measures to mitigate wheel rail squeal and will endeavour to mitigate this noise source. TTC endeavours to minimize the noise and vibration impacts associated with its transit operations and is committed to providing good operating conditions to the extent technologically, economically and administratively feasible.

It is recognised that levels of sound and vibration at special trackwork, such as at crossovers and turnouts, are inevitably higher than along tangent track. Also, there is a limit to the degree of mitigation that is feasible at special trackwork areas. This is to be taken into account in predicting sound and vibration levels near these features and in applying the levels in this protocol. Special trackwork, such as at crossovers and turnouts, is encompassed within the framework of this document.

This protocol applies to existing and proposed residential development having municipal approval on the date of this protocol. The protocol also applies to existing and municipally approved proposed nursing homes, group homes, hospitals and other such institutional land uses where people reside. This protocol does not apply to commercial and industrial land uses.

This protocol does not apply closer than 15 m to the centreline of the nearest track. Any such cases shall be assessed on a case by case basis.

Part D of this document deals with air-borne noise from the Line and its construction. Part E deals with ground-borne noise and vibration from the Line.

PART C. DEFINITIONS

The following definitions apply to both parts D and E of this document.

Ancillary Facilities:

Subsidiary locations associated with either the housing of personnel or equipment engaged in TTC activities or associated with mainline revenue operations. Examples of ancillary facilities include, but are not limited to, subway stations, bus terminals, emergency services buildings, fans, fan and vent shafts, substations, mechanical equipment plants, maintenance and storage facilities, and vehicle storage and maintenance facilities.

Passby Time Interval:

The passby time interval of a vehicle is given by its total length and its speed. The start of the pass-by is defined as that point in time when the leading wheels pass a reference point. The end of the pass-by is defined as that point in time when the last wheels of the vehicle pass the same reference point. The reference point is to be chosen to give the highest level at the point of reception or point of assessment, i.e. usually at the point of closest approach. From a signal processing perspective, the passby time interval will be defined in the prediction and measurement methods being developed.

PART D. AIR-BORNE NOISE

1.0 DEFINITIONS

The following definitions are to be used only within the context of Part D of this document.

Ambient:

The ambient is the sound existing at the point of reception in the absence of all noise from the Line. In this protocol the ambient is taken to be the noise from road traffic and existing industry. The ambient specifically excludes transient noise from aircraft and railways, except for pre-existing TTC rail operations.

Daytime Equivalent Sound Level:

$L_{eq,16h}$ is the daytime equivalent sound level. The definition of equivalent sound level is provided in Reference 2. The applicable time period is from 07:00 to 23:00 hours.

Nighttime Equivalent Sound Level:

$L_{eq,8h}$ is the nighttime equivalent sound level. The applicable time period is from 23:00 to 07:00 hours.

Point of Reception:

Daytime: 07:00 - 23:00 hours

Any outdoor point on residential property, 15 m or more from the nearest track's centreline, where sound originating from the Line is received.

Nighttime: 23:00 - 07:00 hours

The plane of any bedroom window, 15 m or more from the nearest track's centreline, where sound originating from the Line is received. At the planning stage, this is usually assessed at the nearest facade of the premises.

Passby Sound Level, L_{passby} :

Within the context of this document, the passby sound level is defined as the A-weighted equivalent sound level, L_{eq} [Reference 2] over the passby time interval.

2.0 RAIL TRANSIT

In the assessment of noise impact, rail transit is considered to include the movement of vehicles between stations, the movement and idling of vehicles inside stations as well as the movement of vehicles between the mainline and ancillary facilities. Ancillary facilities are not considered part of the rail transit and are assessed as stationary sources. Vehicles idling in maintenance yards and storage facilities are part of the stationary source.

The assessment of noise impact resulting from the Line is to be performed in terms of the following sound level descriptors:

1) Daytime equivalent sound level, $L_{eq,16h}$
2) Nighttime equivalent sound level, $L_{eq,8h}$
3) Passby Sound Level, L_{passby}

The predicted daytime and nighttime equivalent sound levels include the effects of both passby sound level and frequency of operation and are used to assess the noise impact of the Line. The Passby Sound Level criterion is used to assess the sound levels received during a single vehicle passby. The criteria and methods to be used are discussed in Sections 2.1 and 2.2.

2.1 Criteria

Noise impact shall be predicted and assessed during design of the Line using the following sound level criteria:

DAYTIME EQUIVALENT SOUND LEVEL:

The limit at a point of reception for the predicted daytime equivalent sound levels for rail transit operating alone (excluding contributions from the ambient) is 55 dBA or the ambient $L_{eq,16h}$, whichever is higher.

NIGHTTIME EQUIVALENT SOUND LEVEL:

The limit at a point of reception for the predicted nighttime equivalent sound levels for rail transit operating alone (excluding contributions from the ambient) is 50 dBA or the ambient $L_{eq,8h}$, whichever is higher.

PASSBY SOUND LEVEL:

The limit at a point of reception for predicted L_{passby} for a single vehicle operating alone and excluding contributions from other sources is 80 dBA. This limit is based on vehicles operating on tangent track. It does not apply within 100m of special trackwork and excludes wheel rail squeal.

Mitigating measures will be incorporated in the design of the Line when predictions show that any of the above limits are exceeded by more than 5 dB. All mitigating measures shall ensure that the predicted sound levels are as close to, or lower than, the respective limits as is technologically, economically, and administratively feasible.

2.2 Prediction

In most cases, a reasonable estimate of the ambient sound level can be made using a road traffic noise prediction method such as that described in Reference 8, and the

minimum sound levels in Table 106-2 of Reference 6. Prediction of road traffic L_{eq} is preferred to individual measurements in establishing the ambient. Prediction techniques for the L_{eq} from road traffic and the L_{eq} or L_{passby} from transit shall be compatible with one another. Any impact assessment following this protocol shall include a description of the prediction method and the assumptions and sound level data inherent in it. Prediction and measurement methods compatible with MOEE guidelines and procedures are being developed by the TTC at the date of this protocol in consultation with MTO and MOEE.

3.0 ANCILLARY FACILITIES

Predicted noise impacts from ancillary facilities shall be assessed during the design of the Line in accordance with the stationary source guidelines detailed in Reference 6. The predictions used shall be compatible with and at least as accurate as CSA Standard Z107.56.

4.0 BUSES IN MIXED TRAFFIC

Where buses are part of the road traffic there are no additional criteria requirements beyond those presented in the Ministry of Transportation of Ontario Protocol for dealing with noise concerns during the preparation, review and evaluation of Provincial Highways Environmental Assessments [Reference 1]. Buses should be considered as medium trucks in the traffic noise prediction models.

5.0 CONSTRUCTION

Noise impacts from the construction of the Line are to be examined. For the purposes of impact assessment and identifying the need for mitigation, the Ministry of the Environment and Energy guidelines for construction presented in Reference 7 are to be referred to.

PART E: GROUND-BORNE VIBRATION

The assessment of ground-borne vibration impact is confined to the vibration that is produced by the operation of the Line and excludes vibration due to maintenance activities.

In recognition of the fact that the actual vibration response of a building is affected by its own structural characteristics, this document deals with the assessment of ground-borne vibration only on the outside premises. Structural characteristics of buildings are beyond the scope of this protocol and beyond the control of the TTC.

It is recognised that ground-borne vibration can produce air-borne noise inside a structure and there is a direct correlation between the two. The TTC can only control ground-borne noise by controlling ground-borne vibration. Accordingly, ground-borne noise will be predicted and assessed in terms of vibration measured at a point of assessment using the limit in Section 2.0, Vibration Assessment.

1.0 DEFINITIONS

The following definitions are to be used only within the context of Part E of this document:

Point of Assessment:

A point of assessment is any outdoor point on residential property, 15 m or more from the nearest track's centreline, where vibration originating from the Line is received.

Vibration Velocity:

Vibration Velocity is the root-mean-square (rms) vibration velocity assessed during a vehicle pass-by. The unit of measure is metres per second (m/s) or millimetres per second (mm/s). For the purposes of this protocol only vertical vibration is assessed. The vertical component of transit vibration is usually higher than the horizontal. Human sensitivity to horizontal vibration at the frequencies of interest is significantly less than the sensitivity to vertical vibration.

2.0 VIBRATION ASSESSMENT

Vibration velocities at points of assessment shall be predicted during design of the Line. If the predicted rms vertical vibration velocity from the Line exceeds 0.14 mm/sec, mitigation methods shall be applied during the detailed design to meet this criterion to the extent technologically, economically and administratively feasible.

Any impact assessment following this protocol shall include a description of the prediction method and the assumptions and data inherent in it. Prediction and measurement methods are being developed by the TTC at the date of this protocol in cooperation with MTO and MOEE.

APPENDIX C

SAMPLE CALCULATION OF PREDICTED SOUND LEVELS DUE TO ROAD TRAFFIC

APPENDIX C-1
SAMPLE CALCULATION OF PREDICTED SOUND LEVELS

FILE: 18-090
NAME: 91 Eglinton Avenue East
REFERENCE DRAWINGS: Concept Plan
LOCATION: Building A, Southeast Façade, top residential floor

Noise Source:	Hurontario Street	Eglinton Avenue East
Segment Angle:	-90 to 0	-90 to 90
Time Period:	16 hr. (day)	16 hr. (day)
Distance (m):	187	30

CALCULATION OF PREDICTED SOUND LEVELS*

Reference Leq (dBA)*:	72.02	71.24
Distance Correction (dBA):	-10.96	-3.01
Finite Element Correction (dBA):	-3.01	0.00
Allowance for Future Growth (dBA):	incl.	incl.
LeqDay (dBA):	58.05	68.23
Combined LeqDay (dBA)	68.71	

* Leq determined using the computerized model of the Ministry of the Environment Noise Assessment Guidelines, STAMSON Version 5.04 (ORNAMENT). See attached printouts.

Note: The contribution of the Hurontario LRT is not acoustically significant relative to the road sources above and has not been shown above.

APPENDIX C-2
SAMPLE CALCULATION OF PREDICTED SOUND LEVELS

FILE: 18-090
NAME: 91 Eglinton Avenue East
REFERENCE DRAWINGS: Concept Plan
LOCATION: Building A, Southeast Façade, top residential floor

Noise Source:	Hurontario Street	Eglinton Avenue East
Segment Angle:	-90 to 0	-90 to 90
Time Period:	8 hr. (night)	8 hr. (night)
Distance (m):	187	30

CALCULATION OF PREDICTED SOUND LEVELS*

Reference Leq (dBA)*:	65.48	64.69
Distance Correction (dBA):	-10.96	-3.01
Finite Element Correction (dBA):	-3.01	0.00
Allowance for Future Growth (dBA):	incl.	incl.
LeqNight (dBA):	51.51	61.68
Combined LeqNight (dBA)	62.20	

* Leq determined using the computerized model of the Ministry of the Environment Noise Assessment Guidelines, STAMSON Version 5.04 (ORNAMENT). See attached printouts.

Note: The contribution of the Hurontario LRT is not acoustically significant relative to the road sources above and has not been shown above.

```
STAMSON 5.0        NORMAL REPORT        Date: 24-05-2019 12:12:36
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: tatop.te             Time Period: Day/Night 16/8 hours
Description: Tower A SE Facade Top Storey Building Requirement

Road data, segment # 1: EGLINTON (day/night)
-----------------------------------------------
Car traffic volume  : 37714/4190  veh/TimePeriod  *
Medium truck volume :   642/71    veh/TimePeriod  *
Heavy truck volume  :   525/58    veh/TimePeriod  *
Posted speed limit  :    60 km/h
Road gradient       :     2 %
Road pavement       :     1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

    24 hr Traffic Volume (AADT or SADT):  43200
    Percentage of Annual Growth        :   0.00
    Number of Years of Growth          :   0.00
    Medium Truck % of Total Volume     :   1.65
    Heavy Truck  % of Total Volume     :   1.35
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 1: EGLINTON (day/night)
-------------------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  30.00 / 30.00  m
Receiver height           : 139.30 / 139.30 m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Road data, segment # 2: HURONTARIO (day/night)
-----------------------------------------------
Car traffic volume  : 33089/3677  veh/TimePeriod  *
Medium truck volume :   958/106   veh/TimePeriod  *
Heavy truck volume  :   784/87    veh/TimePeriod  *
Posted speed limit  :    60 km/h
Road gradient       :     2 %
Road pavement       :     1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

    24 hr Traffic Volume (AADT or SADT):  38700
    Percentage of Annual Growth        :   0.00
    Number of Years of Growth          :   0.00
    Medium Truck % of Total Volume     :   2.75
    Heavy Truck  % of Total Volume     :   2.25
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: HURONTARIO (day/night)
-------------------------------------------
Angle1   Angle2           : -90.00 deg   0.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 187.00 / 187.00 m
Receiver height           : 139.30 / 139.30 m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00
```

```
Results segment # 1: EGLINTON (day)
-----------------------------------

Source height = 1.08 m

ROAD (0.00 + 68.23 + 0.00) = 68.23 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -90     90   0.00  71.24   0.00  -3.01   0.00   0.00   0.00   0.00  68.23
-------------------------------------------------------------------------------

Segment Leq : 68.23 dBA

Results segment # 2: HURONTARIO (day)
-------------------------------------

Source height = 1.22 m

ROAD (0.00 + 58.05 + 0.00) = 58.05 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -90      0   0.00  72.02   0.00 -10.96  -3.01   0.00   0.00   0.00  58.05
-------------------------------------------------------------------------------

Segment Leq : 58.05 dBA

Total Leq All Segments: 68.63 dBA

Results segment # 1: EGLINTON (night)
-------------------------------------

Source height = 1.08 m

ROAD (0.00 + 61.68 + 0.00) = 61.68 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -90     90   0.00  64.69   0.00  -3.01   0.00   0.00   0.00   0.00  61.68
-------------------------------------------------------------------------------

Segment Leq : 61.68 dBA

Results segment # 2: HURONTARIO (night)
---------------------------------------

Source height = 1.22 m

ROAD (0.00 + 51.51 + 0.00) = 51.51 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -90      0   0.00  65.48   0.00 -10.96  -3.01   0.00   0.00   0.00  51.51
-------------------------------------------------------------------------------

Segment Leq : 51.51 dBA

Total Leq All Segments: 62.08 dBA

RT/Custom data, segment # 1: LRT (day/night)
--------------------------------------------
1 - Custom (81.0 dBA):
Traffic volume    :   560/88    veh/TimePeriod
Speed             :    60 km/h

Data for Segment # 1: LRT (day/night)
-------------------------------------
Angle1   Angle2           : -90.00 deg   0.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 187.00 / 187.00 m
Receiver height           : 139.30 / 139.30 m
Topography                :      1       (Flat/gentle slope; no barrier)
Re
```

```
Results segment # 1: LRT (day)
------------------------------

Source height = 0.50 m

RT/Custom (0.00 + 51.45 + 0.00) = 51.45 dBA
Angle1 Angle2  Alpha RefLeq  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------
   -90      0   0.00  65.42 -10.96  -3.01   0.00   0.00   0.00  51.45
-------------------------------------------------------------------------

Segment Leq : 51.45 dBA

Total Leq All Segments: 51.45 dBA

Results segment # 1: LRT (night)
--------------------------------

Source height = 0.50 m

RT/Custom (0.00 + 46.43 + 0.00) = 46.43 dBA
Angle1 Angle2  Alpha RefLeq  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------
   -90      0   0.00  60.39 -10.96  -3.01   0.00   0.00   0.00  46.43
-------------------------------------------------------------------------

Segment Leq : 46.43 dBA

Total Leq All Segments: 46.43 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 68.71
                           (NIGHT): 62.20
```

APPENDIX D

SAMPLE CALCULATION OF SOUND LEVELS DUE TO STATIONARY SOURCES - CADNAA

Point Sources

Name	M.	ID	Result. PWL			Lw / Li		Operating Time			K0	Direct.	Height	
			Day	Evening	Night	Type	Value	Day	Special	Night				
			(dBA)	(dBA)	(dBA)			(min)	(min)	(min)	(dB)		(m)	
Montanas RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Montanas RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Montanas RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Montanas EF		!0100!	81.4	81.4	81.4	Lw	EF	60.00	60.00	60.00	0.0	(none)	1.20	g
Esso RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Home Furnishings RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Home Furnishings RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Home Furnishings RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Home Furnishings RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Home Furnishings RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Home Furnishings RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
LA FItness RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
LA FItness RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
LA FItness RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
LA FItness RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
LA FItness RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Second Cup Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Second Cup Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Second Cup Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Second Cup Bldg EF		!0100!	81.4	81.4	81.4	Lw	EF	60.00	60.00	60.00	0.0	(none)	0.80	g
Swiss Chalet EF		!0100!	81.4	81.4	81.4	Lw	EF	60.00	60.00	60.00	0.0	(none)	0.80	g
Swiss Chalet EF		!0100!	81.4	81.4	81.4	Lw	EF	60.00	60.00	60.00	0.0	(none)	0.80	g
Swiss Chalet EF		!0100!	81.4	81.4	81.4	Lw	EF	60.00	60.00	60.00	0.0	(none)	0.80	g
Swiss Chalet EF		!0100!	81.4	81.4	81.4	Lw	EF	60.00	60.00	60.00	0.0	(none)	0.80	g
Swiss Chalet RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Swiss Chalet RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Swiss Chalet RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Swiss Chalet RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Swiss Chalet RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Swiss Chalet RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Swiss Chalet RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
TD Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g

Name	M.	ID	Result. PWL			Lw / Li		Operating Time			K0	Direct.	Height	
			Day	Evening	Night	Type	Value	Day	Special	Night				
			(dBA)	(dBA)	(dBA)			(min)	(min)	(min)	(dB)		(m)	
TD Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
TD Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
TD Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
TD Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
TD Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
TD Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
TD Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
TD Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
TD Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
TD Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
TD Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Oceans RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Oceans RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Oceans DC1		!0100!	99.9	99.9	99.9	Lw	BohnBFH	60.00	42.00	24.00	0.0	(none)	1.50	g
Oceans DC2		!0100!	99.9	99.9	99.9	Lw	BohnBFH	60.00	42.00	24.00	0.0	(none)	1.50	g
Oceans RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Oceans EF		!0100!	81.4	81.4	81.4	Lw	EF	60.00	60.00	60.00	0.0	(none)	10.00	r
Oceans EF		!0100!	81.4	81.4	81.4	Lw	EF	60.00	60.00	60.00	0.0	(none)	2.00	g
Oceans EF		!0100!	81.4	81.4	81.4	Lw	EF	60.00	60.00	60.00	0.0	(none)	2.00	g
Oceans EF		!0100!	81.4	81.4	81.4	Lw	EF	60.00	60.00	60.00	0.0	(none)	0.80	g
Oceans RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Oceans RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
RBC Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
RBC Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
RBC Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
RBC Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
RBC Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
RBC Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
RBC Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
RBC Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
RBC Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
RBC Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
RBC Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g

Name	M.	ID	Result. PWL			Lw / Li		Operating Time			K0	Direct.	Height	
			Day	Evening	Night	Type	Value	Day	Special	Night				
			(dBA)	(dBA)	(dBA)			(min)	(min)	(min)	(dB)		(m)	
RBC Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
RBC Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
RBC Bldg EF		!0100!	81.4	81.4	81.4	Lw	EF	60.00	60.00	60.00	0.0	(none)	0.80	g
CCS Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
CCS Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
CCS Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
CCS Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Toys R Us RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Toys R Us RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Toys R Us RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Toys R Us RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Toys R Us RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Swiss Chalet Bldg EF		!0100!	81.4	81.4	81.4	Lw	EF	60.00	60.00	60.00	0.0	(none)	1.20	g
Swiss Chalet Bldg EF		!0100!	81.4	81.4	81.4	Lw	EF	60.00	60.00	60.00	0.0	(none)	1.20	g
Swiss Chalet Bldg EF		!0100!	81.4	81.4	81.4	Lw	EF	60.00	60.00	60.00	0.0	(none)	1.20	g
Pizza Hut Bldg EF		!0100!	81.4	81.4	81.4	Lw	EF	60.00	60.00	60.00	0.0	(none)	1.20	g
Pizza Hut Bldg EF		!0100!	81.4	81.4	81.4	Lw	EF	60.00	60.00	60.00	0.0	(none)	1.20	g
Pizza Hut Bldg EF		!0100!	81.4	81.4	81.4	Lw	EF	60.00	60.00	60.00	0.0	(none)	1.20	g
Pizza Hut Bldg EF		!0100!	81.4	81.4	81.4	Lw	EF	60.00	60.00	60.00	0.0	(none)	1.50	g
Pizza Hut Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Pizza Hut Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Pizza Hut Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Pizza Hut Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Pizza Hut Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Pizza Hut Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Pizza Hut Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Pizza Hut Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Pizza Hut Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Pizza Hut Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Pizza Hut Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Pizza Hut Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Pizza Hut Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Pizza Hut Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g

Name	M.	ID	Result. PWL			Lw / Li		Operating Time			K0	Direct.	Height	
			Day	Evening	Night	Type	Value	Day	Special	Night				
			(dBA)	(dBA)	(dBA)			(min)	(min)	(min)	(dB)		(m)	
Pizza Hut Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Pizza Hut Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Pizza Hut Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Pizza Hut Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Harveys Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Harveys Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Harveys Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Harveys Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Harveys Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Harveys Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Harveys Bldg RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Harveys Bldg EF		!0100!	81.4	81.4	81.4	Lw	EF	60.00	60.00	60.00	0.0	(none)	1.20	g
Harveys Bldg EF		!0100!	81.4	81.4	81.4	Lw	EF	60.00	60.00	60.00	0.0	(none)	1.20	g
Harveys Bldg EF		!0100!	81.4	81.4	81.4	Lw	EF	60.00	60.00	60.00	0.0	(none)	1.20	g
Wilcox EF		!0100!	81.4	81.4	81.4	Lw	EF	60.00	60.00	60.00	0.0	(none)	0.80	g
Pizza Hut Bldg EF		!0100!	81.4	81.4	81.4	Lw	EF	60.00	60.00	60.00	0.0	(none)	1.50	g
Mastermind RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Scotiabank RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Long Term Care RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Long Term Care RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Long Term Care RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Long Term Care RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Long Term Care RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Long Term Care RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Forum Italia RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Forum Italia RTU		!0100!	80.1	80.1	80.1	Lw	LGH060072	60.00	42.00	24.00	0.0	(none)	1.20	g
Reefer Truck Idle		!0100!	102.7	102.7	102.7	Lw	RTP	60.00	60.00	30.00	0.0	(none)	3.00	r
Starbucks Dirve Thru Speake		!0100!	84.4	84.4	84.4	Lw	SP	10.00	10.00	5.00	0.0	(none)	1.50	r
Starbucks Dirve Thru Car 1		!0100!	77.6	77.6	77.6	Lw	CAR	60.00	60.00	60.00	0.0	(none)	1.00	r
Starbucks Dirve Thru Car 2		!0100!	77.6	77.6	77.6	Lw	CAR	60.00	60.00	60.00	0.0	(none)	1.00	r
Starbucks Dirve Thru Car 3		!0100!	77.6	77.6	77.6	Lw	CAR	60.00	60.00	30.00	0.0	(none)	1.00	r
Starbucks Dirve Thru Car 4		!0100!	77.6	77.6	77.6	Lw	CAR	60.00	60.00	30.00	0.0	(none)	1.00	r
Starbucks Dirve Thru Car 5		!0100!	77.6	77.6	77.6	Lw	CAR	60.00	60.00	30.00	0.0	(none)	1.00	r

Jade File: 18-090 June 2019

Name	M.	ID	Result. PWL			Lw / Li		Operating Time			K0	Direct.	Height	
			Day	Evening	Night	Type	Value	Day	Special	Night				
			(dBA)	(dBA)	(dBA)			(min)	(min)	(min)	(dB)		(m)	
Montanas EF		!0100!	87.0	87.0	87.0	Lw	EF+5.6	60.00	60.00	60.00	0.0	(none)	1.00	g
Montanas EF		!0100!	87.0	87.0	87.0	Lw	EF+5.6	60.00	60.00	60.00	0.0	(none)	1.00	g
EF1		!0100!	90.8	90.8	90.8	Lw	BB_EF1	60.00	60.00	0.00	0.0	(none)	4.00	g
EF2		!0100!	93.0	93.0	93.0	Lw	GB081+19	60.00	60.00	60.00	0.0	(none)	1.13	g
EF3		!0100!	72.0	72.0	72.0	Lw	GB071	60.00	60.00	60.00	0.0	(none)	0.80	g
EF4		!0100!	72.0	72.0	72.0	Lw	GB071	60.00	60.00	60.00	0.0	(none)	0.80	g
EF5		!0100!	74.0	74.0	74.0	Lw	GB081	60.00	60.00	60.00	0.0	(none)	0.80	g
EF6		!0100!	74.0	74.0	74.0	Lw	GB081	60.00	60.00	60.00	0.0	(none)	0.80	g
EF7		!0100!	74.0	74.0	74.0	Lw	GB081	60.00	60.00	60.00	0.0	(none)	0.80	g
EF8		!0100!	74.0	74.0	74.0	Lw	GB081	60.00	60.00	60.00	0.0	(none)	0.80	g
AC1		!0100!	82.0	82.0	82.0	Lw	KEZA060	60.00	42.00	24.00	0.0	(none)	1.26	g
AC2		!0100!	82.0	82.0	82.0	Lw	KEZA060	60.00	42.00	24.00	0.0	(none)	0.96	g
AC3		!0100!	81.9	81.9	81.9	Lw	KEZA050	60.00	42.00	24.00	0.0	(none)	0.96	g
AC4		!0100!	82.0	82.0	82.0	Lw	KEZA060	60.00	42.00	24.00	0.0	(none)	0.96	g
AC5		!0100!	78.0	78.0	78.0	Lw	KEZA025	60.00	42.00	24.00	0.0	(none)	0.70	g
C8		!0100!	78.0	78.0	78.0	Lw	KEZA025	60.00	42.00	24.00	0.0	(none)	1.10	g
RTU1		!0100!	88.3	88.3	88.3	Lw	D3CG120	60.00	42.00	24.00	0.0	(none)	1.20	g
RTU2		!0100!	85.4	85.4	85.4	Lw	D6CG060	60.00	42.00	24.00	0.0	(none)	1.00	g
RTU3		!0100!	85.4	85.4	85.4	Lw	D6CG060	60.00	42.00	24.00	0.0	(none)	1.00	g
RTU4		!0100!	81.4	81.4	81.4	Lw	GCS16653	60.00	42.00	24.00	0.0	(none)	1.00	g
RTU5		!0100!	87.4	87.4	87.4	Lw	LGA150	60.00	42.00	24.00	0.0	(none)	1.40	g
RTU6		!0100!	83.8	83.8	83.8	Lw	D1CG072	60.00	42.00	24.00	0.0	(none)	1.00	g
RTU7		!0100!	83.8	83.8	83.8	Lw	D1CG072	60.00	42.00	24.00	0.0	(none)	1.00	g
RTU8		!0100!	85.4	85.4	85.4	Lw	D6CG060	60.00	42.00	24.00	0.0	(none)	1.00	g
RTU9		!0100!	81.4	81.4	81.4	Lw	GCS16653	60.00	42.00	24.00	0.0	(none)	1.20	g
RTU10		!0100!	87.3	87.3	87.3	Lw	LGA120	60.00	42.00	24.00	0.0	(none)	1.10	g
RTU11		!0100!	81.4	81.4	81.4	Lw	GCS16653	60.00	42.00	24.00	0.0	(none)	1.90	g
RTU12		!0100!	78.8	78.8	78.8	Lw	KGA072	60.00	42.00	24.00	0.0	(none)	1.65	g
RTU13		!0100!	87.3	87.3	87.3	Lw	LGA120	60.00	42.00	24.00	0.0	(none)	1.40	g
RTU14		!0100!	80.4	80.4	80.4	Lw	GCS16311	60.00	42.00	24.00	0.0	(none)	0.70	g
RTU15		!0100!	81.4	81.4	81.4	Lw	GCS16653	60.00	42.00	24.00	0.0	(none)	0.97	g
RTU16		!0100!	88.3	88.3	88.3	Lw	LGH092	60.00	42.00	24.00	0.0	(none)	1.63	g
RTU17		!0100!	87.3	87.3	87.3	Lw	LGA120	60.00	42.00	24.00	0.0	(none)	1.40	g

Jade File: 18-090 June 2019

Name	M.	ID	Result. PWL			Lw / Li		Operating Time			K0	Direct.	Height	
			Day	Evening	Night	Type	Value	Day	Special	Night				
			(dBA)	(dBA)	(dBA)			(min)	(min)	(min)	(dB)		(m)	
RTU18		!0100!	85.8	85.8	85.8	Lw	LGA088	60.00	42.00	24.00	0.0	(none)	1.27	g
RTU19		!0100!	85.8	85.8	85.8	Lw	LGA088	60.00	42.00	24.00	0.0	(none)	1.27	g
RTU20		!0100!	81.4	81.4	81.4	Lw	LGA060	60.00	42.00	24.00	0.0	(none)	1.05	g
SB RTU1		!0100!	81.4	81.4	81.4	Lw	KGA060	60.00	42.00	24.00	0.0	(none)	1.14	g
SB RTU2		!0100!	88.3	88.3	88.3	Lw	KGA120	60.00	42.00	24.00	0.0	(none)	1.79	g
SB RTU3		!0100!	87.3	87.3	87.3	Lw	LGA120	60.00	42.00	24.00	0.0	(none)	1.40	g
SB RTU4		!0100!	81.1	81.1	81.1	Lw	Carrier48	60.00	42.00	24.00	0.0	(none)	1.75	g
SB RTU5		!0100!	85.4	85.4	85.4	Lw	D6CG060	60.00	42.00	24.00	0.0	(none)	1.02	g
SB EF1		!0100!	74.0	74.0	74.0	Lw	GB081	60.00	60.00	0.00	0.0	(none)	0.80	g
BP EF1		!0100!	71.5	71.5	71.5	Lw	VEDK08	60.00	60.00	0.00	0.0	(none)	0.80	g
BP RTU1		!0100!	78.8	78.8	78.8	Lw	KGB074	60.00	42.00	24.00	0.0	(none)	1.35	g
BP RTU2		!0100!	78.1	78.1	78.1	Lw	D1NA024	60.00	42.00	24.00	0.0	(none)	1.00	g
BP RTU3		!0100!	81.1	81.1	81.1	Lw	Carrier48	60.00	42.00	24.00	0.0	(none)	1.15	g
BP RTU4		!0100!	74.6	74.6	74.6	Lw	KGB036	60.00	42.00	24.00	0.0	(none)	1.12	g
BP RTU6		!0100!	88.3	88.3	88.3	Lw	KGB102	60.00	42.00	24.00	0.0	(none)	1.43	g
BP RTU5		!0100!	88.3	88.3	88.3	Lw	KGB102	60.00	42.00	24.00	0.0	(none)	1.70	g
BP EF2		!0100!	85.0	85.0	85.0	Lw	BP_EF2	60.00	60.00	0.00	0.0	(none)	1.30	g
BP COND1		!0100!	78.0	78.0	78.0	Lw	KEZA025	60.00	42.00	24.00	0.0	(none)	0.74	g
L1		!0100!	78.0	78.0	78.0	Lw	RSF180	60.00	42.00	24.00	0.0	(none)	1.10	g

Line Sources

Name	M.	ID	Result. PWL			Result. PWL'			Lw / Li			Direct.	Moving Pt. Src			
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.		Number			Speed
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)		Day	Evening	Night	(km/h)
Reefer Truck Delivery		!0101!	85.9	85.9	85.9	62.7	62.7	62.7	PWL-Pt	RTP		(none)	1.0	1.0	1.0	10.0
Toys R Us Truck Route		!0101!	80.2	80.2	-19.8	58.9	58.9	-41.1	PWL-Pt	TP		(none)	1.0	1.0	0.0	10.0
Oceans Truck Route		!0101!	87.6	87.6	-12.4	62.7	62.7	-37.3	PWL-Pt	RTP		(none)	1.0	1.0	0.0	10.0
Swiss Chalet Building Truck Route		!0101!	87.8	87.8	-12.2	62.7	62.7	-37.3	PWL-Pt	RTP		(none)	1.0	1.0	0.0	10.0
Home Furnishings Truck Route		!0101!	85.0	85.0	-15.0	58.9	58.9	-41.1	PWL-Pt	TP		(none)	1.0	1.0	0.0	10.0
Harveys Truck Route		!0101!	83.5	83.5	-16.5	62.7	62.7	-37.3	PWL-Pt	RTP		(none)	1.0	1.0	0.0	10.0
Truck Delivery		!0101!	82.1	82.1	-17.9	58.9	58.9	-41.1	PWL-Pt	TP		(none)	1.0	1.0	0.0	10.0

Area Sources

Name	M.	ID	Result. PWL			Result. PWL"			Lw / Li		Operating Time		
			Day	Evening	Night	Day	Evening	Night	Type	Value	Day	Special	Night
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			(min)	(min)	(min)
C1-7		!0100!	86.8	86.8	86.8	79.7	79.7	79.7	Lw	LCBO_Cond	60.00	42.00	24.00

Vertical Area Sources

Name	M.	ID	Result. PWL			Result. PWL"			Lw / Li		Operating Time			K0	Direct.
			Day	Evening	Night	Day	Evening	Night	Type	Value	Day	Special	Night		
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			(min)	(min)	(min)	(dB)	
EF9		!0100!	71.1	71.1	71.1	81.5	81.5	81.5	Lw"	EF9	60.00	60.00	0.00	0.0	(none)

Buildings

Name	M.	ID	RB	Residents	Absorption	Height	
						Begin	
						(m)	
LCBO		!00!		0	0.37	5.45	r
ShoppersB		!00!		0	0.37	4.85	r
Montanas		!00!		0	0.37	7.00	r
Montanas Garbage		!00!		0	0.37	3.50	r
Burgers Priest Bldg		!00!		0	0.37	4.30	r
Starbucks Bldg		!00!		0	0.37	4.80	r
Second Cup		!00!		0	0.37	5.00	r
Scotiabank		!00!		0	0.37	6.00	r
Mastermind		!00!		0	0.37	8.00	r
Mastermind		!00!		0	0.37	8.00	r
Swiss Chalet etc		!00!		0	0.37	7.00	r
Oceans		!00!		0	0.37	10.00	r
LA Fitness Bldg		!00!		0	0.37	10.00	r
Toys R Us		!00!		0	0.37	8.00	r
Pizza Hut etc		!00!		0	0.37	6.00	r
Harveys etc		!00!		0	0.37	8.00	r
CCS etc		!00!		0	0.37	8.00	r
RBC etc		!00!		0	0.37	6.00	r
Long Term Care		!00!		0	0.37	15.00	r
Forum Italia Family Living		!00!		0	0.37	25.00	r
Esso		!00!		0	0.37	3.50	r
Oceans Upper		!00!		0	0.37	1.50	g
Long Term Care Rooftop Elevator Roor		!00!		0	0.37	3.00	g
ShoppersA		!00!	x	0	0.37	5.00	r
ShoppersC		!00!	x	0	0.37	6.27	r
ShoppersD		!00!	x	0	0.37	6.27	r
SleepCountry		!00!	x	0	0.37	5.30	r
Bombay		!00!	x	0	0.37	5.50	r
Tower A-B - 2 Storeys Podium		!00!	x	0	0.37	5.40	r
Tower A - 45 Storeys		!00!	x	0	0.37	136.90	g
Tower A - 8 Storeys		!00!	x	0	0.37	22.80	g
Tower A - 7 Storeys		!00!	x	0	0.37	19.55	g

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Name	M.	ID	RB	Residents	Absorption	Height	
						Begin	
						(m)	
Tower A - 6 Storeys		!00!	x	0	0.37	16.60	g
Tower A - 5 Storeys		!00!	x	0	0.37	13.35	g
Tower A - 4 Storeys		!00!	x	0	0.37	10.40	g
Tower A - 3 Storeys		!00!	x	0	0.37	3.60	g
Tower B - 40 Storeys		!00!	x	0	0.37	120.95	g
Tower B - 8 Storeys		!00!	x	0	0.37	22.80	g
Tower B - 7 Storeys		!00!	x	0	0.37	19.55	g
Tower B - 6 Storeys		!00!	x	0	0.37	16.60	g
Tower B - 5 Storeys		!00!	x	0	0.37	13.35	g
Tower B - 4 Storeys		!00!	x	0	0.37	10.40	g
Tower B - 3 Storeys		!00!	x	0	0.37	3.60	g
Tower E - 40 Storeys		!00!	x	0	0.37	126.50	r
Tower E - 1 Storey		!00!	x	0	0.37	5.40	r
Tower E - 12 Storeys		!00!	x	0	0.37	40.00	r
Tower E - 10 Storeys		!00!	x	0	0.37	33.80	r
Tower E - 8 Storeys		!00!	x	0	0.37	27.60	r
Tower E - 6 Storeys		!00!	x	0	0.37	21.40	r
Tower E - 4 Storeys		!00!	x	0	0.37	15.20	r
Tower E - 2 Storey Podium		!00!	x	0	0.37	9.00	r
Tower D - 33 Storey Podium		!00!	x	0	0.37	104.50	r
Tower D - 9 Storey Podium		!00!	x	0	0.37	30.55	r
Tower D - 6 Storey Podium		!00!	x	0	0.37	21.40	r
Tower D - 4 Storey Podium		!00!	x	0	0.37	15.20	r
Tower D - 2 Storey Podium		!00!	x	0	0.37	9.00	r
Tower G - 28 Storey		!00!	x	0	0.37	96.55	r
Tower G - 12 Storey		!00!	x	0	0.37	40.00	r
Tower G - 8 Storey		!00!	x	0	0.37	27.60	r
Tower G - 7 Storey		!00!	x	0	0.37	24.35	r
Tower G - 6 Storey		!00!	x	0	0.37	21.40	r
Tower G - 5 Storey		!00!	x	0	0.37	18.15	r
Tower G - 4 Storey		!00!	x	0	0.37	15.20	r
Tower G - 3 Storey		!00!	x	0	0.37	11.95	r
Tower G - 2 Storey		!00!	x	0	0.37	9.00	r

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Name	M.	ID	RB	Residents	Absorption	Height	
						Begin	
						(m)	
Building H3		!00!	x	0	0.37	10.50	r
Building H2		!00!	x	0	0.37	10.50	r
Building H1		!00!	x	0	0.37	10.50	r
Building D 1 Storey		!00!	x	0	0.37	5.40	r

APPENDIX E

SAMPLE CALCULATION OF ARCHITECTURAL COMPONENT SELECTION

APPENDIX E-1
SAMPLE CALCULATION OF ARCHITECTURAL COMPONENT SELECTION*

FILE: 18-090
NAME: 91 Eglinton Avenue East
REFERENCE DRAWINGS: Concept Plan
LOCATION: Building A, Southeast Façade, top residential floor

ROAD AND LRT

Room: Corner Living Room

Wall area as a percentage of floor area:	Southeast:	30%
	Southwest:	30%
Window area as a percentage of floor area:	Southeast:	50%
	Southwest:	50%
Number of components:	4	
Outdoor Daytime Leq:	Southeast:	69 (+3 for reflections) = 72 dBA
	Southwest:	66 (+3 for reflections) = 69 dBA
Indoor Leq:	45	
Noise Reduction (dBA):	Southeast:	27
	Southwest:	24
Noise Spectrum:	**Mixed Road and Distant Aircraft**	
Absorption:	Intermediate	

APPROPRIATE ELEMENTS

		STC Rating
Exterior Wall	Southeast	STC 36
	Southwest	STC 33
Window	Southeast	STC 33
	Southwest	STC 30

* Based upon "Controlling Sound Transmission into Buildings", Building Practice Note 56 by National Research Council of Canada, September, 1985.

APPENDIX E-2
SAMPLE CALCULATION OF ARCHITECTURAL COMPONENT SELECTION*

FILE: 18-090
NAME: 91 Eglinton Avenue East
REFERENCE DRAWINGS: Concept Plan
LOCATION: Building A, Southeast Façade, top residential floor

AIRCRAFT

Room: Corner Living Room

Wall area as a percentage of floor area:	Southeast:	30%
	Southwest:	30%
Window area as a percentage of floor area:	Southeast:	50%
	Southwest:	50%
Number of components:	4	
Outdoor NEP/NEF:	28 (+3 for reflections) = 31	
Indoor NEP/NEF:	5	
Angle Correction:	0	
Noise Reduction (dBA):	Southeast:	26
	Southwest:	26
Noise Spectrum:	**Distant Aircraft**	
Absorption:	Medium	

APPROPRIATE ELEMENTS

		STC Rating
Exterior Wall	Southeast	STC 35
	Southwest	STC 35
Window	Southeast	STC 32
	Southwest	STC 32

* Based upon “Controlling Sound Transmission into Buildings”, Building Practice Note 56 by National Research Council of Canada, September, 1985.

APPENDIX E-3

SUMMARY OF COMBINED STC RATING REQUIREMENTS

BUILDING A – SOUTHEAST FAÇADE

CORNER LIVING ROOM

COMBINED	REQUIRED STC BASED ON ROAD AND LRT TRAFFIC ONLY	REQUIRED STC BASED ON AIR TRAFFIC ONLY	COMBINED REQUIRED STC RATING*
Southeast Wall	36	35	39
Southwest Wall	33	35	37
Southeast Window	33	32	36
Southwest Window	30	32	34

* An STC 36 rating for the window and an STC 39 rating for the exterior wall construction are better than constructions complying with Standard Construction practices.

APPENDIX F

CITY OF MISSISSAUGA COMMENTS

PLANNING APPLICATION STATUS REPORT

P&B/Planning & Building Dept
P&B/Develop & Design Division
City of Mississauga
300 City Centre Drive
MISSISSAUGA ON L5B 3C1
Tel: (905) 896-5511
Fax: (905) 896-5553

File: 21T-M 18 5
Applicant: BROLL, GLEN
Proposal: 6 residential apartment buildings (up to 45 storeys) with grade related podiums, a public park and and amenity building
Address: 5055 HURONTARIO ST.
91 EGLINTON AVE. E
General Location: NW HURONTARIO ST AND EGLINTON AVE EAST

MILESTONE DESCRIPTION

Milestone	Description
RECOMMENDATION REPORT	Required prior to planner preparing Recommendation Report to PDC
1ST SERVICING SUB	Required prior to making first servicing servicing submission
INFO REPORT	Required prior to planner preparing Information Report to PDC.
REGISTRATION	Required prior to registration of M-Plan
NOTE:	Note for applicant's information only - no action required.
SERV AND/OR DEV. AGT	Required prior to finalization of Servicing and/or Development Agreement
PLAN REGISTRATION (SCHEDULE B)	Clause to be included into Schedule 'B' of the Development Agreement
DRAFT APPR	Required prior to draft approval.
PLAN REGISTRATION (SCHEDULE C)	Condition to be included into Schedule 'C' of the Development Agreement

PLANNING AND BUILDING

PLANNER - DEV DESIGN

Contact: Caleigh McInnes Tel. (905) 791-7800 x4645

No	Milestone	Condition
1	NOTE:	Please be advised that updates to Community Services and Dufferin Peel District School Board comments are forthcoming. Development and Design Planning Comments will be provided on the OZ 18-16 file. Comments on the 21T-18-005 must be read in conjunction with the OZ file. **Created :** 2019-02-06 04:55:36 **Last Modified :**

LANDSCAPE ARCH - DEV DESIGN

Contact: Cameron Maybee Tel. (905) 615-3200 x4041

No	Milestone	Condition
1	RECOMMENDATION REPORT	Mississauga encourages sustainable stormwater management by maximizing the natural infiltration and retention of rainwater through site development. Consider a pervious stable surface for parking areas and driveways, rainwater harvesting, greywater irrigation system, bioretention systems, green roofs and other technologies. A Building and Site Design Features - Green Development Standards Compliance Summary prepared by Glen Schnarr & Associates Inc. dated September 20, 2018 has been received and the following comments have been provided: + Section 3.0 has indicated the following Low Impact Development strategies may be feasible throughout the proposed development: Rainwater Harvesting, Green Roofs, Enhanced Grass Swale and Bioretention, Permeable Pavement, and Enhanced Topsoil. The implementation of these features should be considered early on in the conceptual development of the proposal, please illustrate the potential location of Low Impact Development features on the Site Plan and Conceptual Landscape Plan for our information with the next submission. Please investigate opportunties to limit the amount of excessive hard surfacing on-site and provide more soft landscaped areas throughout the proposed development. The Development Agreement is to include a clause indicating that Low Impact Development features will be included in all phases of the proposed Development to address the Green Development Strategies and Guidelines approved by City Council. Additional details will be required through the Site Plan Application process. Note that the term "pervious stable surface" is to be used to identify areas on the Site Plan for permeable interlocking concrete pavement, pervious concrete, or porous asphalt. Refer to www.sustainabletechnologies.ca for further information. **Created :** 2018-10-30 01:39:38 **Last Modified :** 2019-02-26 08:23:39

PLANNING AND BUILDING

LANDSCAPE ARCH - DEV DESIGN Contact: Cameron Maybee Tel. (905) 615-3200 x4041

No	Milestone	Condition
2	RECOMMENDATION REPORT	Mississauga encourages alternative multi-modal transportation types to reduce congestion, pollution and automobile dependency while improving public health. In an effort to promote and support bicycle usage, provide an exterior bicycle rack(s) in close proximity to the front entrance for visitors. Exterior and interior bike racks / storage should be considered on the concept plan at an early stage with details to be provided as part of the Site Plan Application process. **Created :** 2018-10-30 02:51:09 **Last Modified :** 2018-11-26 08:12:57
3	RECOMMENDATION REPORT	The submitted Urban Design Study prepared by Studio TLA dated September 18, 2018 has included a precedent image labelled 'Amenity Roof'; however, this precedent does not allow for active recreational uses as highlighted in the supplementary text. The design of the proposed Green Roof within the Central Outdoor Amenity Space should be considered early on in the design stage and should function as usable open space for the proposed development. Please confirm the funtion / design of the proposed Green Roof illustrated within the Central Outdoor Amenity Space for our information with the next submission. Please revise the Conceptual Landscape Plan accordingly with the next submission. **Created :** 2018-11-09 09:08:44 **Last Modified :** 2019-02-01 10:47:24
4	RECOMMENDATION REPORT	The applicant is advised that By-law #254-12 (Private Tree Protection By-Law) requires owners to obtain a permit to injure or remove trees if 3 or more trees of 150mm dbh or greater are to be removed in one calendar year on private property. The applicant is to submit a 'Tree Injury or Destruction Questionnaire and Declaration' form, and a 'Application to Permit the Injury or Destruction of Trees on Private Property' form. (For Zoning Applications, the above is required prior to the Supplementary Report.) They can be found respectively at the following City web site links: http://www6.mississauga.ca/onlinemaps/planbldg/forms/planning/TreeInjuryOrDestructionFormFeb2013.pdf http://www6.mississauga.ca/onlinemaps/planbldg/forms/planning/Form_2205_Permit_Destruct_Trees.pdf The approval of the Tree Permit may be required prior to the issuance of site plan approval. Tree Permit applications are to be submitted to the Forestry Section, 950 Burnhamthorpe Road West. For further information please contact the Urban Forestry Section of the City of Mississauga Community Services Department at 905-615-3200 ext. 4100. **Created :** 2018-10-22 02:30:09 **Last Modified :** 2019-02-01 10:47:24

File: 21T-M 18 5
Proposal: 6 residential apartment buildings (up to 45 storeys) with grade related podiums, a public park and and amenity building

PLANNING AND BUILDING

LANDSCAPE ARCH - DEV DESIGN Contact: Cameron Maybee Tel. (905) 615-3200 x4041

No	Milestone	Condition
5	RECOMMENDATION REPORT	A Tree Inventory and Preservation Plan Report prepared by Kuntz Forestry Consulting Inc. dated September 18, 2018 has been received and the following comments have been provided: + The Tree Protection Detail included on Figure 1: Tree Inventory & Preservation Plan is out-of-date, please include the most up-to-date detail on the Tree Inventory & Preservation Plan with the next submission. The required detail can be found at: http://www7.mississauga.ca/documents/pb/main/2017/HoardingDetail.pdf. + The Tree Inventory & Preservation Plan has indicated Trees #1, 2, 3, 143, and 146 are located within the municipal boulevard or on neighbouring property. Please be advised written authorization is required from the neighbouring property owners prior to any tree removal work commencing on neighbouring properties. + Please updated the Tree Inventory & Preservation Plan to reflect the revised proposal. Please ensure all existing trees in close proximity to the east property line are captured within the Tree Inventory & Preservation Plan with the next formal submission. Please be advised more comments may be provided based on the review of this new information. Please note additional details will be required through the Site Plan Application process. **Created :** 2018-11-01 10:18:41 **Last Modified :** 2019-02-26 07:57:35
6	RECOMMENDATION REPORT	A Streetscaping Feasibility Study prepared by Crozier Consulting Engineers dated September 2018 has been received and the following comments have been provided: + The City of Mississauga Cycling Master Plan has identified Eglinton Avenue East as a cycling corridor which is to include a multi-use trail, the submitted Eglinton Avenue East Sections are to be revised to include the required multi-use trail. Please refer to Transportation & Works comments for more details. + The submitted Eglinton Avenue Cross Sections are to be revised to indicate the extent of the required road widenings by the Transportation & Works Department. The required streetscape cross-section is to begin at the extent of the required road widening. Please revise the submitted Eglinton Avenue East Sections for our review with the next resubmission. + Please revise the all the submitted cross-sections to provide the separation distance between the joint utility corridor and the streetscape corridor for our information with the next submission. Please be advised a minimum .3m seperation distance is required between the joint utility corridor and streetscape corridor. Please be advised if the Belbin Street road extension is deemed a requirement from the Transportation & Works Department the Streetscape Feasibility Study must also include the Belbin Street road extension. Please refer to Transportation & Works and Community Services Department comments for more details. **Created :** 2018-10-22 10:46:52 **Last Modified :** 2019-02-01 10:47:24

PLANNING AND BUILDING

LANDSCAPE ARCH - DEV DESIGN Contact: Cameron Maybee Tel. (905) 615-3200 x4041

No	Milestone	Condition
7	RECOMMENDATION REPORT	A Preliminary Pedestrian Level Wind Study prepared by Theakston Environmental dated September 7, 2018 has been received and the following comments have been provided: + Section 1: Conclusions and Recommendations, Page 2 states "Where mitigation was recommended, it was achieved through: parapet walls, stepped facades, overhangs, canopies, balconies, porous fencing, screen walls, landscaping, plantings, and others, that were incorporated into the proposed Development's massing and landscape design." Please be advised landscaping features are not an acceptable wind mitigation technique where plant material is unable to thrive as per the City's Urban Design Terms of Reference for Pedestrian Wind Comfort and Safety Studies. Please evaluate the use of architectural features in an effort to improve the wind condition in Probe Locations that have been identified as an uncomfortable condition. + Section 5: Results, Rooftop Outdoor Amenity Areas has identified Probes 23 & 37 as uncomfortable throughout the seasons. In addition, the Preliminary Pedestrian Level Wind Study has identified that a mitigation plan will be required for the rooftop outdoor amenity areas. Please provide a conceptual mitigation plan for the rooftop outdoor amenity areas, as recommended by the submitted Preliminary Pedestrian Level Wind Study, for our review with the next submission. + Figure 7d: Pedestrian Level Wind Velocity Comfort Categories - Winter - Proposed has identified Probes 5, 7, 14, 18, 23, 34, 35, 37, 38, 39, and 42 as being uncomfortable. Please evaluate the use of architectural features to improve these Probe locations to a walking condition or better. + Please ensure the Preliminary Pedestrian Level Wind Study is updated accordingly to reflect the revised proposal. Please ensure it considers all additional outdoor amenity space locations that have been proposed as part of the revised proposal within the analysis. Please illustrate any required wind mitigation features on the Site Plan and Conceptual Landscape Plan with the next submission. Additional details will be required through the Site Plan Application process. Please refer to Urban Designer & Community Service - Planner comments for more details. **Created :** 2018-10-22 09:53:28 **Last Modified :** 2019-02-26 08:25:58

File: 21T-M 18 5
Proposal: 6 residential apartment buildings (up to 45 storeys) with grade related podiums, a public park and and amenity building

PLANNING AND BUILDING

LANDSCAPE ARCH - DEV DESIGN Contact: Cameron Maybee Tel. (905) 615-3200 x4041

No	Milestone	Condition
8	RECOMMENDATION REPORT	An Environmental Noise Feasibility Study prepared by Jade Acousitcs Inc. dated September 10, 2018 has been received and the following comments provided: + Section 5.1.2: Outdoors, indicates sound levels greater than 60 dBA are predicted at many of the outdoor amenity areas. Please be advised noise attenuation measures will be required to bring all outdoor amenity areas into conformance with the dBA limits highlighted in the submitted Environmental Noise Feasibility Study. + Please ensure the Environmental Noise Feasibility Study is updated accordingly to reflect the revised proposal. Please ensure it considers all additional outdoor amenity space locations that have been proposed as part of the revised proposal within the analysis. Please illustrate any required noise mitigation features on the Site Plan and Conceptual Landscape Plan with the next submission. Additional details will be required through the Site Plan Application process. Please refer to Urban Designer comments for more details. **Created :** 2018-10-22 03:28:03 **Last Modified :** 2019-02-26 08:29:27

PLANNING AND BUILDING

LANDSCAPE ARCH - DEV DESIGN Contact: Cameron Maybee Tel. (905) 615-3200 x4041

No	Milestone	Condition
9	RECOMMENDATION REPORT	A Shadow Study prepared by DIALOG dated September 18, 2018 has been received and the following comments have been made: + Section 2.4 - Public Realm is incomplete and has not provided an Angular Plane analysis for the future public road extension of Thornwood Drive. Section 3.2 - Angular Planes to Protection Opposite Boulevards & Sidewalks has not provided sufficient justification for the exclusion of Thornwood Drive from the Angular Plane analysis. The Angular Plane analysis for the future public road extension of Thornwood Drive is to be considered within the Shadow Study to conform the City of Mississauga's Standards for Shadow Studies dated June 2014 with the next submission. + Section 2.4 - Public Realm has identified the proposed massing of Towers 'D', 'E', and 'F' do not conform to the City of Mississauga's Standards for Shadow Studies dated June 2014. The proposed massing/heights of the proposed towers should be reduced in an effort to improve the impact on the future right-of-way. + Section 3.1 - Public Park and Communal Outdoor Amenity Areas has identified the proposed development massing/heights do not allow for adequate sun access for the proposed public parkland or communal outdoor amenity areas on September 21 or December 21. The massing/heights of the proposed development should be reduced in an effort to improve the impact on the proposed outdoor amenity areas including the future parkland. + + Please ensure the Shadow Study is updated accordingly to reflect the revised proposal. Please ensure it considers all additional outdoor amenity space locations that have been proposed as part of the revised proposal within the analysis. Please refer to Urban Designer comments for more details. Please revise the submitted Shadow Study accordingly with the next submission. **Created :** 2018-11-09 09:45:09 **Last Modified :** 2019-02-26 08:30:33
10	RECOMMENDATION REPORT	The City of Mississauga's Outdoor Amenity Area Design Reference Note states required Outdoor Amenity Areas are to be calculated based on a rate of 5.6 sq.m or 10% of the total site area. Also, a minimum of 50% of the required Outdoor Amenity Area shall be provided in one contiguous area and a minimum of 50% of the Outdoor Amenity Area is to be provided at grade. Please provide detailed Outdoor Amenity Space calculations including 'required' and 'proposed' for our review with the next submission. **Created :** 2018-11-01 09:05:23 **Last Modified :** 2019-02-01 10:47:24

File: 21T-M 18 5
Proposal: 6 residential apartment buildings (up to 45 storeys) with grade related podiums, a public park and and amenity building

PLANNING AND BUILDING

LANDSCAPE ARCH - DEV DESIGN Contact: Cameron Maybee Tel. (905) 615-3200 x4041

No	Milestone	Condition
11	RECOMMENDATION REPORT	The City of Mississauga Zoning By-law 0225-2007 defines Landscaped Buffer as: a continuous, open, unobstructed width of land substantially parallel to and adjoining a lot line that is intended for the growth and maintenance of plant material including trees, shrubs and other landscape features such as retaining walls. Please be advised the proposed underground parking structures are not to be located within the required Landscape Buffers on-site. The required Landscaped Buffers along the easterly and westerly property lines are heavily impacted by the proposed multi-use trails and private roadway network for the proposed Residential Tower G, which has drastically limited the ability for significant plantings to occur between the subject property and adjacent land uses. The layout of the multi-use trails and private road network should be re-oriented to allow for high-branching deciduous trees to be planted along the property lines to provide a continuous landscaped buffer between the proposed development and adjacent properties. Please illustrate all the required landscape buffers on the Site Plan with the next submission for our information. The applicant is advised that a 4.5m landscape buffer is required along all street frontages and lands zoned 'RM4-4', and a 3.0m landscaped buffer is required adjacent to the lands zoned 'C2-7'. Please revise plans accordingly with the next submission. **Created :** 2018-10-31 09:43:20 **Last Modified :** 2019-02-26 07:58:41
12	RECOMMENDATION REPORT	Please label the proposed setback from the underground parking structure on the Site Plan with the next submission. Please be advised a minimum 3.0m setback will be required for the underground parking structure along all municipal street frontages and property lines. The City of Mississauga Green Development Standards Section 4.1 - New Trees, states that new trees planted primarily in hardscape areas, should allow for a minimum soil volume of 15 cubic metres. Please provide numerous sections throughout the site illustrating the amount of soil coverage to occur over the underground parking structure for our information and review with the next submission. Please be advised that the use of raised planters to achieve adequate soil coverage for plant material is not desirable and should be avoided. Please refer to Transportation & Works comments regarding encroachment of shoring within the municipal boulevard. **Created :** 2018-10-22 02:30:09 **Last Modified :** 2019-02-26 08:02:47

PLANNING AND BUILDING

LANDSCAPE ARCH - DEV DESIGN Contact: Cameron Maybee Tel. (905) 615-3200 x4041

No	Milestone	Condition
13	RECOMMENDATION REPORT	Please be advised all encroachments illustrated within the municipal boulevard are to be removed from the drawings. Please revise plans accordingly with the next submission. **Created :** 2018-10-22 02:00:04 **Last Modified :** 2019-02-01 10:47:24
14	RECOMMENDATION REPORT	Please provide several sections illustrating the grading relationship between the proposed development and the adjacent properties for our information and review with the next submission. The proposed grading and site design along the easterly property line should be re-visited in an effort to reduce the grading variation between the two sites and limit the use of extensive retaining walls. The proposed grading along the easterly property line should be designed in a manner to allow for the adjacent site to develop grade oriented units fronting on to the private roadway. Please refer to Transportation & Works and Urban Designer comments for more details. **Created :** 2018-11-01 09:56:29 **Last Modified :** 2019-02-01 10:47:24
15	RECOMMENDATION REPORT	Please indicate all existing and proposed utiltiies on the Site Plan for our review with the next formal submission. Please indicate the location of the required Hydro Vault Rooms on the Ground Floor Plan for our information with the next submission. The Site Plan is to indicate all turning radii / staging areas required to access and service the required Hydro Vault Room as it may impact potential landscaped areas and pedestrian circulation patterns throughout the site. Please contact Alectra for more details regarding Hydro Vault Rooms, required turning radii, and associated staging area dimensions. Please revise plans accordingly with the next submission. **Created :** 2018-11-09 08:40:43 **Last Modified :** 2019-02-26 08:18:33

File: 21T-M 18 5
Proposal: 6 residential apartment buildings (up to 45 storeys) with grade related podiums, a public park and and amenity building

PLANNING AND BUILDING

LANDSCAPE ARCH - DEV DESIGN Contact: Cameron Maybee Tel. (905) 615-3200 x4041

No	Milestone	Condition
16	RECOMMENDATION REPORT	Please illustrate all exhaust vents/shafts on the Site Plan with the next submission for our information. Please be advised the exhaust vents/shafts are not to be located within any required landscape buffers and should be located thoughtfully on-site to mitigate potential conflicts with the pedestrian realm. Please investigate opportunities to incorporate the required exhaust vents/shafts on the proposed built form to eliminate any potential conflicts with pedestrians. Please revise the Site Plan / Elevations accordingly with the next submission. **Created :** 2018-11-09 08:31:30 **Last Modified :** 2019-02-01 10:47:24
17	RECOMMENDATION REPORT	The proposed massing and heights of the proposed towers throughout the site has led to excessive shadows, wind, and noise impacts on a majority of the proposed pedestrian realm throughout the development. The proposal is to be revised to improve the condition of the pedestrian realm on private and future public property by mitigating the proposed shadow, wind, and noise impacts. The location of pedestrian comfort facilities should be considered early on in the design stage. Please illustrate pedestrian comfort facilities within the public realm and within the subject property on the Conceptual Landscape Plan with the next submission for our information. The implementation of pedestrian comfort facilities should be considered in close proximity to prinicpal building entrances and passenger drop-off areas. Please refer to Urban Designer and Community Services - Planner comments for more details. Please revise the Conceptual Landscape Plan accordingly with the next submission. Additional details will be required through the Site Plan Application process. **Created :** 2018-11-09 08:48:15 **Last Modified :** 2019-02-26 08:04:29
18	NOTE:	Please note detailed comments will be provided as part of the Site Plan Application process and are subject to the resolution and finalization of the Official Plan Amendment, Rezoning Application, and Subdivision Application. **Created :** 2018-10-19 09:46:20 **Last Modified :** 2018-11-12 01:04:27
19	NOTE:	Please note additional comments may be provided upon review of this and any new information. **Created :** 2018-10-19 09:47:12 **Last Modified :** 2018-11-12 01:04:27

URBAN DESIGNER Contact: Michael Votruba Tel. (905) 615-3200 x5759

PLANNING AND BUILDING

URBAN DESIGNER Contact: Michael Votruba Tel. (905) 615-3200 x5759

No	Milestone	Condition
1	RECOMMENDATION REPORT	UD01 Major Issues - To summarize, major issues have been identified with the site planning and design of the proposed development related to the following: - Official Plan Policies for Uptown Major Node - Excessive height and does not promote a diversity of uses - Official Plan Policies for Uptown Special Site 2 - Acceptable egress and ingress to the site has not been demonstrated - Official Plan Policies for Road Networks - A fine grained-system of roads has not been demonstrated and future connectivity in the Uptown Node will be negatively impacted - Official Plan Policies for Chapter 9 - Inadequately addresses several policies including City Pattern, Public Realm, Movement, Context, Transition, and Parking Servicing & Loading - Mississauga's Downtown Built Form Standards - Tower floor plate sizes are too large, tower separations in some locations are too close, podium design is not well articulated, and environmental impacts from wind and shadow are severe - Technical issues related to garbage/service, frontages, amenity space, sun/shadow, wind/microclimate, noise, CPTED, and overlook The urban design comments to follow will detail these major concerns. **Created :** 2018-11-23 04:25:44 **Last Modified :** 2019-02-05 04:31:15
2	RECOMMENDATION REPORT	UD02 OP Uptown Heights - The proposed development does not meet OP Policies for the Uptown Node regarding height: Refer to OP Policy 13.1.1.2 for lands within a Major Node, a minimum building height of two storeys to a maximum building height of 25 storeys is required - Towers A, B, D, E, F and G range in heights between 45 and 30 stories and are in excess of the maximum height requirement Refer to OP Policy 13.1.1.3 proposals with heights more than 25 storeys will only be considered where it can be demonstrated to the City's satisfaction the following: a. an appropriate transition in heights that respects the surrounding context is achieved; this is not satisfied in the following ways: - Towers F, D, and G do not transition appropriately to the adjacent context - Towers F, D, and G do not step down appropriately to address the adjacent context - Landscape buffers are not significant and do not help with transition b. the development proposal enhances the existing or planned development; this is not satisfied in the following ways: - The surrounding context will be negatively impacted by the development in terms of sun/shadow, wind, and visual impacts c. the City Structure hierarchy is maintained; this is not satisfied in the following way: - The development is not compatible with the approved plans that surround the site d. the development proposal is consistent with the policies of the Official Plan; this is not satisfied in the following ways: - Refer to the inconsistencies with the OP noted in UD Comment #1 and items a - c above **Created :** 2018-11-23 04:25:44 **Last Modified :** 2019-02-06 05:03:55

File: 21T-M 18 5
Proposal: 6 residential apartment buildings (up to 45 storeys) with grade related podiums, a public park and and amenity building

PLANNING AND BUILDING

URBAN DESIGNER Contact: Michael Votruba Tel. (905) 615-3200 x5759

No	Milestone	Condition
3	RECOMMENDATION REPORT	UD03 OP Uptown Special Site 2 - The proposed development is inconsistent with Uptown Special Site 2 policies in the OP 13.4.4.2.2 Uptown Special Site 2 states that the following additional policies will apply to the site: a. A concept plan will be required to address, among other matters: compatibility of building form and scale with existing and proposed surrounding land uses; and acceptable ingress and egress arrangements for Hurontario Street, Eglinton Avenue East, and Thornwood Drive; The concept plan does not adequately address these policies in the following ways. Compatibility of building form is not suitable - There are major issues with the compatibility of the proposed development to the surrounding context with a proposed significant increase in density compared to the adjacent sites - The heights of the proposed towers do not transition appropriately to the adjacent context and are overbuilt particularly close to the existing property lines - The proposed buildings are not designed in a manner which reflects the scale, character, and massing of the surrounding area - The compatibility of building massing, frontages, materials, and architectural details do not address the abutting streets and intersections appropriately - The tower floor plate sizes and tower separations do not meet Mississauga's Built Form Standards for high rise buildings - The height and density of the development are substantially in excess of the existing and planned context of the area Acceptable ingress and egress arrangements is not satisfactory - The proposed streets and blocks compatible with the planned LRT on Hurontario Street and a suitable pedestrian environment has not been provided appropriately for the scale of the project - The ingress and egress proposed does not respect approved plans for the surrounding area that should include an extension of Belbin Street as a public road intersecting with Eglinton Ave. - A public dedicated road that extends Belbin Street to Eglinton Ave has not been provided - The movement of garbage and service vehicles is not to Regional Standards and not supported by Urban Design **Created :** 2018-11-23 04:25:44 **Last Modified :** 2019-02-07 10:00:54

PLANNING AND BUILDING

URBAN DESIGNER Contact: Michael Votruba Tel. (905) 615-3200 x5759

No	Milestone	Condition
4	RECOMMENDATION REPORT	UD04 Height - Reduce the tower heights to be in conformance with the following: - Building F - Transition to the neighbouring context with a mid-rise building in the location of Building F. Create a lower podium with a height that matches the planned context on the north side of Armdale Road east of Belbin Street. Reduce Tower F to match the approved development height to the northwest and mimic the podium heights of residential building D. - Building G - Please consider mid-rise heights for tower G. Transition to the neighbouring townhouse context with a mid-rise podium for Building G with a maximum height of 6 stories. Remove the terracing portions of the tower that are between 7 stories and 16 stories. Create a stepback at level 2 facing the townhouses to the east. Limit the height of Tower G to improve the transition to the residential area to the east of the site. - Vary the tower heights by increments of three stories. Towers heights should contribute to the massing and articulation of the development. Tower heights should start with a maximum height of 25 storeys consistent with the Official Plan at the southwest corner of the site closest to Hurontario St. and step down to a maximum of 2 storeys at the northeast corner. **Created :** 2018-11-23 04:25:44 **Last Modified :** 2019-02-07 11:09:17
5	RECOMMENDATION REPORT	UD05 Tower G - The massing of Tower G should be greatly reduced please see the recommendations in the UD Height Comment. Further to these recommendations the scale of Block G is too large. Please consider breaking down the scale of Block G by extending the private street that runs parallel to Eglinton Ave. to connect with the private street that runs along the east side of the site. Break the building into two blocks that are separated by the street extension. Medium density should be considered for the Tower G Block with lower heights that transition to the height of the adjacent 2 storey townhouses. **Created :** 2018-11-23 04:25:44 **Last Modified :** 2019-02-07 11:09:17

File: 21T-M 18 5
Proposal: 6 residential apartment buildings (up to 45 storeys) with grade related podiums, a public park and and amenity building

PLANNING AND BUILDING

URBAN DESIGNER Contact: Michael Votruba Tel. (905) 615-3200 x5759

No	Milestone	Condition
6	RECOMMENDATION REPORT	UD06 Belbin St Extension - Please refer to the following OP Policies. A fine grain road network is essential to the future planning and connectivity of the Uptown Node area. 8.2.2.3 Mississauga will strive to create a fine-grained system of roads that seeks to increase the number of road intersections and overall connectivity throughout the city. 8.2.2.4 The creation of a finer grain road pattern will be a priority in Intensification Areas. 8.2.2.5 Additional roads may be identified during the review of development applications and through the local area review process. The City may require the completion of road connections and where appropriate, the creation of a denser road pattern through the construction of new roads. A public street connecting Belbin Street to Eglinton Ave. east is required. Please see traffic review and fire review comments. The public road should provide provision for vehicles, fire trucks, garbage/service, cycling and pedestrians. With the addition of a public road extending Belbin St. to Eglinton Ave. the location of loading and service accesses will need to be reconsidered. Please find an alternative location potentially creating a lane along the east side of Towers F and E to provide access for the loading areas or other solution. **Created :** 2018-11-23 04:25:44 **Last Modified :** 2019-02-07 11:09:17
7	RECOMMENDATION REPORT	UD07 Pedestrian Walkways - Provide greater emphasis on pedestrian safety throughout the plan. Consider defined pedestrian crossings at all intersections and emphasize safe movement throughout the site. Further detail is needed to design pedestrian and vehicular areas to create a safe environment maintaining the curbless design. Please demonstrate how pedestrian areas will be differentiated from vehicular areas and how pedestrian crossing areas will be articulated. **Created :** 2018-11-23 04:25:44 **Last Modified :** 2019-02-07 11:09:17
8	RECOMMENDATION REPORT	UD08 Retail on Eglinton - Provide retail at grade to create active frontage along Eglinton Ave. The frontage and streetscape along Eglinton Ave. should be compatible with retail uses. Please provide commercial uses along the building frontages facing Eglinton Ave. The retail provided along Eglinton Ave. should provide a flexible range of unit sizes and adaptable built form to support a range of different tenants. **Created :** 2018-11-23 04:25:44 **Last Modified :** 2018-11-26 11:00:54

PLANNING AND BUILDING

URBAN DESIGNER Contact: Michael Votruba Tel. (905) 615-3200 x5759

No	Milestone	Condition
9	RECOMMENDATION REPORT	UD09 Garbage and Loading Access - The garbage and loading areas should be consolidated with vehicular access and should be concealed inside the buildings. Loading, garbage/recycling, and vehicular parking should occur internally with one controlled access point. The garbage/loading vehicle should be able to maneuver internally and drive out in a forward direction. Redesign garbage and loading areas to avoid trucks reversing over sidewalks and pedestrian areas. Please consider consolidating the number of garbage/loading areas for towers that share the same podium including Towers E & F and Towers A & B. **Created :** 2018-11-23 04:25:44 **Last Modified :** 2018-11-26 11:00:54
10	RECOMMENDATION REPORT	UD10 Garbage Rooms - All garbage rooms should be fully internalized or moved to the underground level(s). Relocate the garbage rooms so that they are fully internalized without frontage on the building exterior. If it is not feasible to internalize the garbage rooms on the ground level please consider moving them underground. Please do this for the following buildings Tower A, Tower D, Tower F, Tower E and Tower G. The garbage areas should not have frontage along the exterior facade on the ground floor levels. **Created :** 2018-11-23 04:25:44 **Last Modified :** 2018-11-26 11:15:56
11	RECOMMENDATION REPORT	UD11 Floor Plates Sizes - Please refer to Mississauga's Downtown Core Built Form Standards the standard for towers under 30 storeys tall is a maximum of 750 square meters (gross). Towers A, B, D, E, F, and G are noted on the site plan to be 28 meters by 30 meters for a gross floor plate size of 840 square meters. Please reduce the floor plate size to equal or less than 750 square meters for all towers that are not in conformance with this standard. Since the heights of all towers within the development are recommended to be less than 30 storeys please reduce the floor plate sizes to 750 square meters or less. **Created :** 2018-11-23 04:25:44 **Last Modified :** 2019-02-07 11:09:17
12	RECOMMENDATION REPORT	UD12 Tower Separations and Setbacks - Tower separations between Towers F and E should be increased to 30 meters minimum. The separation between Building A and the property line should be increased to 15 meters minimum. Increase the setback between Building G and the property line to 15 meters. **Created :** 2018-11-23 04:25:44 **Last Modified :** 2019-02-07 11:09:17
13	RECOMMENDATION REPORT	UD13 Step Backs - Set all of the proposed towers back a minimum 3 meters from the face of the podium along public roads, private streets/lanes, amenity space and the public park. Provide dimensions for the setbacks on the site plan. Please have the wind consultant prepare more detailed recommendations regarding step backs that will improve pedestrian comfort for areas identified as uncomfortable, walking, and standing. Where increased step backs are required to improve comfort please demonstrate them in the plans in the next submission. **Created :** 2018-11-23 04:25:44 **Last Modified :** 2019-02-07 11:09:17

File: 21T-M 18 5
Proposal: 6 residential apartment buildings (up to 45 storeys) with grade related podiums, a public park and and amenity building

PLANNING AND BUILDING

URBAN DESIGNER Contact: Michael Votruba Tel. (905) 615-3200 x5759

No	Milestone	Condition
14	RECOMMENDATION REPORT	UD14 Podium Design - The podium elevation for the buildings along Eglinton Ave. should create a continuous street wall with improved enclosure and continuous height. Remove the stepping between Tower A and B and provide a podium at a maximum height that matches the corresponding road right of way. Create a rhythm of bays and canopies that articulate the ground floor frontage for commercial uses. For all buildings provide a hierarchy of design with the most animated uses fronting Eglinton Ave., Public Streets, and the Public Park. **Created :** 2018-11-23 04:25:44 **Last Modified :** 2018-11-26 11:00:54
15	RECOMMENDATION REPORT	UD15 Mid-Block Connection - Please consider providing a public mid-block connection between Towers A & B. The mid-block connection is preferred to be an outdoor connection that separates Tower A & B into two separate blocks. The recommended width of the mid-block connection should be comparable to the width of the right of way of a private road. **Created :** 2018-11-23 04:25:44 **Last Modified :** 2018-11-26 11:15:56
16	RECOMMENDATION REPORT	UD16 Amenity Spaces - The central outdoor amenity space and underground indoor amenity space provided requires further consideration outlined in this comment. For the outdoor amenity space to meet its intended purpose the issues identified in the Wind and Shadow Study should be addressed and the location of the amenity space should be considered in conjunction with recommended performance standards. Please see UD comment Wind Study and Sun/Shadow for further explanation. Outdoor Amenity Space - The tenure of the shared outdoor amenity space needs to be clarified. As planned the space will be contiguous with the adjacent public park. Either a public easement should extend over the outdoor amenity space to function as a privately owned public space or the outdoor amenity spaced should be designed as an entity that is not contiguous with the adjacent public park. The sloped roof top of the outdoor amenity area presents several concerns. Please demonstrate that it is safe and clarify the proposed program for the rooftop amenity area. Please provide more detail and examples of the roof top amenity spaces provided. Underground Indoor Amenity Space - The indoor amenity space proposed underground on the P1 level requires satisfactory natural lighting conditions. Please provide an analysis that demonstrates the natural light access into these spaces. Access to the underground amenity space needs to be better demonstrated. Provide detailed plans demonstrating how the space will be accessed and 3D images of the atrium space proposed. Refer to LA-DD comment 'Amenity Space Calculations' please satisfy the technical requirements as noted. **Created :** 2018-11-23 04:25:44 **Last Modified :** 2018-11-26 11:15:56

PLANNING AND BUILDING

URBAN DESIGNER Contact: Michael Votruba Tel. (905) 615-3200 x5759

No	Milestone	Condition
17	RECOMMENDATION REPORT	UD17 Noise Report - An Environmental Noise Feasibility Study prepared by Jade Acoustics Inc. dated September 10, 2018 has been received and the following comments provided: - Section 5.1.2: Indicates sound levels greater than 60 dBA are predicted at many of the outdoor amenity areas. Please be advised noise attenuation measures will be required to bring all outdoor amenity areas into conformance with the dBA limits highlighted in the submitted Environmental Noise Feasibility Study. Please provide analysis and recommendations developed by the acoustical engineer with options for improving the siting of buildings and massing arrangement to mitigate noise on the outdoor amenity spaces. - Sections 5.1 and 5.2 provide options for addressing noise concerns from transportation and stationary sources on the interior spaces of the buildings. Please provide analysis and recommendations developed by the acoustical engineer with options for improving the setbacks, siting of buildings, and massing arrangements to mitigate noise from stationary sources and transportation sources on interior spaces. Please consider increasing the distance between the loading area on the adjacent commercial site and the proposed residential buildings along the west property line. Provide an addendum to the noise report that outlines these recommendations. Additional details will be required through the Site Plan Application process after improvements to setbacks, siting, and massing are made. **Created :** 2018-11-23 04:25:45 **Last Modified :** 2018-11-28 03:05:22
18	RECOMMENDATION REPORT	UD18 Sun/Shadow Study - The proposed building(s) should be redesigned to minimize shadow impacts onto the surrounding area and proposed park. Shadow impact on the proposed park must be minimized and meet Mississauga's performance standards. Relocating the public park to an area with less shadow impact and/or reducing the tower heights are the primary recommendations for meeting the standards. Shadow on Public Park - The sun/shadow study determines that quantity of shadow is in excess of Mississauga's performance standards on the public park. To correct the excessive shadow on the park the towers that surround it should be reduced in height or tiered with reduced heights that avoid casting shadow on the park. A second alternative is to relocate the park to an area of the site where it will not be as severely impacted by shadows and the performance standards can be met. Shadow on Outdoor Amenity Areas - Excessive shadow is cast on the outdoor amenity areas. Amenity areas are intended to be pleasant shared spaces for residents to enjoy the benefits of the outdoors including sun light. Please reduce the heights of buildings around the amenity space or relocate it to an area that receives less shadow. **Created :** 2018-11-23 04:25:45 **Last Modified :** 2018-11-26 11:15:56

File: 21T-M 18 5
Proposal: 6 residential apartment buildings (up to 45 storeys) with grade related podiums, a public park and and amenity building

PLANNING AND BUILDING

URBAN DESIGNER Contact: Michael Votruba Tel. (905) 615-3200 x5759

No	Milestone	Condition
19	RECOMMENDATION REPORT	UD19 Wind Study - The buildings should be sited to minimize wind impacts onto the proposed development, public park, and the surrounding area. Modifications to the height and arrangement of the buildings, step backs, and other massing strategies should be the first step for improving the wind impacts of the development. A Preliminary Pedestrian Level Wind Study prepared by Theakston Environmental dated September 7, 2018 has been received and the following comments have been provided: In figures 7b annual, 7d winter, 7f spring, 7h summer, and 7j fall wind impacts that are identified as uncomfortable should be mitigated through reductions of building height or step backs. The development should not create wind conditions that are uncomfortable. In the proposed public park and outdoor amenity space annual, spring, and winter wind loads are identified as comfortable for walking. Wind impacts should be improved so that sitting is comfortable in spring months and standing is comfortable in winter months. Reduce the building heights to improve these conditions. On the proposed outdoor amenity roof tops of the podiums of Tower E & F and Tower A & B uncomfortable conditions are identified in the summer, spring, fall and winter. This is a significant concern. The tower heights should be reduced or other massing changes made to improve the wind conditions so that sitting is comfortable. All roof top amenity spaces should be comfortable for sitting during summer months. During winter the entrance to Tower G is identified as uncomfortable, north entrance for Tower A & B is identified as comfortable for walking. All entrances should be comfortable for standing during all seasons. Please see LA - DD Comments regarding the wind study please be advised that landscaping features are not an acceptable wind mitigation technique where plant material is unable to thrive as per the City's Urban Design Terms of Reference for Pedestrian Wind Comfort and Safety Studies. Please provide a conceptual mitigation plan for the rooftop outdoor amenity areas, as recommended by the submitted Preliminary Pedestrian Level Wind Study, for our review with the next submission. Please prioritize reducing building heights, modifying building locations, and other massing changes to improve wind impacts. Please illustrate any required wind mitigation features on the Site Plan and Conceptual Landscape Plan with the next submission and provide an amended wind study. **Created :** 2018-11-23 04:25:45 **Last Modified :** 2018-11-26 11:15:56
20	RECOMMENDATION REPORT	UD20 Canopies - Provide detailed information regarding canopies over the main entrances for all of the buildings. Amend the wind study to provide a detailed analysis to determine suitable canopies to protect the entrances. Please provide canopies over the entrances that are 4.5 meters from the ground and have an unobstructed overhang of 4.5 meters. Further comments will be provided when this analysis is received. **Created :** 2018-11-23 04:25:45 **Last Modified :** 2018-11-26 11:00:54

PLANNING AND BUILDING

URBAN DESIGNER

Contact: Michael Votruba Tel. (905) 615-3200 x5759

No	Milestone	Condition
21	RECOMMENDATION REPORT	UD21 Overlook - The location, size and internal layout of the proposed building creates undesirable overlook conditions onto the neighbouring properties. An alternative design which adequately addresses this issue is required while providing units that to not face directly over the adjacent low-rise residential areas. Improve the height and massing of buildings that neighbor adjacent low-rise housing. **Created :** 2018-11-23 04:25:45 **Last Modified :** 2018-11-26 11:00:54
22	RECOMMENDATION REPORT	UD22 Grading - Please address the grading issues identified. Refer to LA-DD Comment 'Grading / Sections' and T&W comments regarding grading. **Created :** 2018-11-23 04:25:45 **Last Modified :** 2018-11-26 11:15:56
23	RECOMMENDATION REPORT	UD23 Landscape Buffers - Please address the issues related to inadequate landscape buffers and planting along the east and west property lines. Refer to LA-DD Comment 'Required Landscape Buffers'. Refer to UD Comments related to the Belbin Street Public Street Extension a landscape buffer should be provided along the west property line without the multi-use path. **Created :** 2018-11-23 04:25:45 **Last Modified :** 2018-11-26 11:15:56
24	RECOMMENDATION REPORT	UD24 Parking Structure Setback - Please be advised a minimum 3.0m setback will be required from the parking structure along the Eglinton Avenue East frontage. No parking structure should be provided below the Belbin Street Extension - Right of Way. The parking structure should be limited to under buildings and should be avoided under private roads, outdoor amenity areas, and landscape areas. Provide dimensions for the proposed setback from the underground parking structure on the Site Plan with the next submission. Please provide the sections requested in comment LA-DD 'Parking Garage Setback'. **Created :** 2018-11-23 04:25:45 **Last Modified :** 2018-11-26 11:15:56
25	RECOMMENDATION REPORT	UD25 Streetscape Feasibility Study - The City of Mississauga Cycling Master Plan has identified Eglinton Avenue East as a cycling corridor which is to include a multi-use trail. Please revise the Eglinton Ave Frontage to include the multi-use path. Please refer to LA - DD Comment 'Streetscape Feasibility Study' for further requirements. **Created :** 2018-11-23 04:25:45 **Last Modified :** 2018-11-26 11:15:56
26	RECOMMENDATION REPORT	UD26 CPTED - Mississauga City Council has adopted the document "Crime Prevention Through Environmental Design (CPTED)" which is available on the City's website. Applicants are encouraged to review this document to optimize safety and crime prevention on the site. **Created :** 2018-11-23 04:25:45 **Last Modified :** 2018-11-26 11:00:54

File: 21T-M 18 5
Proposal: 6 residential apartment buildings (up to 45 storeys) with grade related podiums, a public park and and amenity building

PLANNING AND BUILDING

URBAN DESIGNER

Contact: Michael Votruba Tel. (905) 615-3200 x5759

No	Milestone	Condition
27	RECOMMENDATION REPORT	UD27 Bike Storage - Provide a communal bicycle storage room for each proposed tower, preferably on the ground floor, for the building occupants and visitors. Please refer to T&W, traffic, active transportation, and health comments for further consideration. **Created :** 2018-11-23 04:25:45 **Last Modified :** 2018-11-26 11:00:54
28	RECOMMENDATION REPORT	UD28 Service and Fire - Indicate on the site plan drawing the travel route of the service vehicles and/or fire trucks. Show all turning radii, travel widths, sufficient back-out space, overhead clearances, internal and/or external storage requirements, etc. Belbin Street should be extended from Nahani Way through to Eglington Avenue as a public street to assist firefighting operations. Extending the road will give options to fire operations entering the area and having trucks and staff accessing buildings. This extension resulting in a through street would provide for versatility in emergency response, ease of response and ultimately for the speed at which MFES can get crews to and into the building. Please include the public road in the next submission. **Created :** 2018-11-23 04:25:45 **Last Modified :** 2018-11-26 11:00:54
29	RECOMMENDATION REPORT	UD29 Urban Design Advisory Panel Comments - Please address the comments provided by the MUDAP (Mississauga Urban Design Advisory Panel) related to the topics below. - Reduce building heights, improve transition and meet design standards - Evaluate park location reduce shadow and wind impacts - Public road along west property - Improve pedestrian circulation - Break down the scale and height of building G - Architectural Variety Minutes have been circulated with more detail on each of these subjects for further consideration. Further comments will be made upon the second panel review and consideration of these comments. **Created :** 2018-11-23 04:25:45 **Last Modified :** 2019-02-06 03:56:54

DEVELOPMENT SERVICES

Contact: Tel.

No	Milestone	Condition
7	REGISTRATION	The applicant will be required to enter into the City's standard Development Agreement. In this regard, the applicant should contact Development Services, Planning and Building Department, directly. **Created :** 2019-04-26 04:24:47 **Last Modified :** 2019-04-26 04:25:09

PLANNING AND BUILDING

DEVELOPMENT SERVICES

Contact: Tel.

No	Milestone	Condition
8	REGISTRATION	The applicant will be required to pay the Legal Services processing fee as set out in the City's current Fees and Charges By-law, in connection with the subdivision Development Agreement. In the event that other agreements are required in connection with the processing of the subdivision application, the applicant will be required to pay the applicable Legal Services processing fees, as set out in the City of Mississauga Fees and Charges By-law. Please contact 905-615-3200 x 5523 for the current rates. **Created :** 2019-04-26 04:24:47 **Last Modified :** 2019-04-26 04:25:09
9	REGISTRATION	The applicant will be required to pay in full, all assessments levied against the property, as well as the current year's taxes and/or local improvement charges. **Created :** 2019-04-26 04:24:47 **Last Modified :** 2019-04-26 04:25:09
10	REGISTRATION	Should there be any mortgagees, we will require that the mortgagees execute in duplicate, a Consent and Postponement with respect to the development agreement. **Created :** 2019-04-26 04:24:47 **Last Modified :** 2019-04-26 04:25:09

TRANSPORTATION AND WORKS

DEVELOPMENT ENGINEERING REVIEW

Contact: Cynthia Urdaneta Tel. (905) 615-3200 x3128

No	Milestone	Condition
1	RECOMMENDATION REPORT	[PROVIDE GEOTECH REPORT] As municipal infrastructure/services and/or public lands are required as part of this development proposal, the owner/applicant is to submit a Geotechnical Report to the satisfaction of this department. The Geotechnical Feasibility Study is to be submitted by a qualified expert to analyse and include but not be limited to the sub-surface soil composition to determine its structural stability and feasibility for any infiltration of groundwater. Further, based on its findings, it shall provide recommendations for the proposed pavement structure for all the roads part of this development which shall meet or exceed minimum City standards. **Created :** 2018-11-22 09:59:59 **Last Modified :** 2019-01-07 03:00:41

File: 21T-M 18 5
Proposal: 6 residential apartment buildings (up to 45 storeys) with grade related podiums, a public park and and amenity building

TRANSPORTATION AND WORKS

DEVELOPMENT ENGINEERING REVIEW

Contact: Cynthia Urdaneta Tel. (905) 615-3200 x3128

No	Milestone	Condition
2	RECOMMENDATION REPORT	[REVISE DRAWINGS] This section received a set of Engineering, Architectural and landscape drawings as part of this application's 1st Submission. The same are to be revised to address the following: (i) Show/depict all the Municipal Road blocks and dimensions, including the extension of Belbin Street up to Eglinton Avenue East as requested on pre-application meeting DARC 18-106 and as per our T&W - Traffic section comments; (ii) Clearly show and label the scope of underground and above ground works for each phase part of the development to ensure each phase works are independent of the each other; (iii) Include on the drawings supporting this application the services and access concept for the adjacent property to the east (131 Eglinton Avenue East). Also revise proposed grades to ensure it is feasible to provide an access either from Thornwood Drive or from the proposed private road to the lot on the East and to ensure the run-off from that site is included on the design sheet for this development; (iv) Servicing Plan to show and label proposed CB's on Belbin Street, Armdale Road and Thornwood Drive and proposed connections to the Municipal storm sewer. Also, ensure to show all the existing services outside the limits of the proposed subdivision (e.g. existing watermain along Thornwood Drive); (v) Provide detailed and at scale cross sections on both Armdale Road and Thornwood Drive, to clearly show grades, boulevard, utilities and services for this site (both existing and proposed) to ensure it will provide the ultimate crowned cross section with 2% cross fall as per City standards, also incorporating the already approved grades for the neighbouring subdivision on the North through applications 43M-1988 and Site Plan applications SP 14/053 and SP 15/077; (vi) On the Grading Plan, show and label ultimate property line along Eglinton Avenue East. Also, provide additional grading information on all the boundaries of the adjacent property to the east of this site; (vii) A portion of the adjacent property at 131 Eglinton Avenue East seems to drain towards this site. Revise proposal to eliminate the proposed wall that interferes with current drainage pattern and that 'encloses' the adjacent property. Also, if negative impacts are caused to existing conditions of neighbouring lands, provide the necessary mitigation measures to counteract those effects; (viii) Provide a drainage system for the park block as the run-off from each block has to be self-contained;

TRANSPORTATION AND WORKS

DEVELOPMENT ENGINEERING REVIEW Contact: Cynthia Urdaneta Tel. (905) 615-3200 x3128

No	Milestone	Condition
2	RECOMMENDATION REPORT	(ix) Clearly label and depict the proposed boulevard dimensions for all Municipal Roads and reflect it on the Site Plan and Grading Plan; (x) Ensure all the engineering drawings are signed and stamped by the responsible P.Eng; (xi) Please complete the benchmark reference note to include the description (location) of the benchmark. **Created :** 2018-11-22 10:08:03 **Last Modified :** 2019-01-07 04:05:31
3	RECOMMENDATION REPORT	[REVISE NOISE STUDY] The owner is to submit an updated Noise Study which is to include the following: (i) Provide a Table depicting a range of barrier heights and corresponding mitigated sound levels (between 55 dBA and 59 dBA) for the outdoor living areas. Also provide the unmitigated sound levels for the outdoor living areas; (ii) Provide a Figure for Item (i) showing the location of the barriers and proposed barrier heights on the proposed development plans. If the recommended barrier height does not acheive outdoor sound levels of 55 dBA, provide a rationale of why a barrier to acheive 55 dBA is not technically, economically or admistratively feasible; (iii) Provide a Figure showing the predicted unmitigated and mititgated sound levels at all receptor points for Transportation & Stationary Noise sources; (iv) Provide cross-sections for the berm/fence combinations (including fence returns) to be implemented at this site (if any) to control noise levels; (v) Address any on-site/off-site stationary noise impacts caused by existing and proposed developments; (vi) All analysis and recommendations (noise control measures) shall be based on this development being a Class 1 Area. (vii) The report shall be revised to assess Vibration from the future Hurontario Light Rail Transit. **Created :** 2018-11-23 09:40:54 **Last Modified :** 2019-01-07 03:54:48

File: 21T-M 18 5
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TRANSPORTATION AND WORKS

DEVELOPMENT ENGINEERING REVIEW Contact: Cynthia Urdaneta Tel. (905) 615-3200 x3128

No	Milestone	Condition
4	REGISTRATION	[COMMON UTILITY TRENCH REQUIRED] Prior to execution of the Agreement for Municipal Infrastucture Works, the developer, under separate arrangements or agreements with the various utility companies, is to determine the precise extent of their requirements. The developer must submit in writing evidence to the Commissioner of Transportation and Works that satisfactory arrangements have been made with the Telecommunications provider, Cable TV, Enbridge and Alectra Utilities for the installation of their plant in a common trench, within the prescribed location on the road allowance. **Created :** 2018-11-22 09:59:59 **Last Modified :** 2019-01-07 03:00:42
5	REGISTRATION	Prior to Registration, the Owner will be required to enter into a Subdivision Agreement with the City containing a Schedule to agree to construct the required municipal works, including but not limited to: - Construction of the required storm sewer outlet works and any necessary municipal works required to service these lands; - Construction of the required boulevard works; - Construction of the required road works; - Construction of the required berm/fence noise barriers; - Detailed design of all works, including site servicing plans, grading plans and drainage plans; - Land dedications, buffer blocks and easements; - Fees, securities and insurance. The Owner shall provide a cost estimate and a Letter of Credit representing 100% of the Owner's total cost for municipal infrastructure works. The agreement is to include reference to the securities required for the completion of the boulevard works and all other matters such as: engineering drawings, timing of construction, notification for inspection, insurance certificate, inspection and processing fees. Please note that the detailed design for the proposed works must account for the possible relocation of any existing services and utilities that may currently be located within both the Eglinton Avenue East, Armdale Road and Thornwood Drive boulevards. In addition, it should be noted that PUCC approval may be required. **Created :** 2018-11-22 09:59:59 **Last Modified :** 2019-01-07 02:49:42

TRANSPORTATION AND WORKS

DEVELOPMENT ENGINEERING REVIEW Contact: Cynthia Urdaneta Tel. (905) 615-3200 x3128

No	Milestone	Condition
6	PLAN REGISTRATION (SCHEDULE B)	Purchasers/tenants are advised that despite the inclusion of noise control features in the development and within the building units, sound levels due to increasing road and rail traffic may on occasions interfere with some activities of the dwelling occupants as the sound levels exceed the sound level limits of the Municipality and the Ministry of the Environment, Conservation and Parks. **Created :** 2018-11-23 10:52:45 **Last Modified :** 2019-01-07 02:49:42
7	PLAN REGISTRATION (SCHEDULE B)	Purchasers/tenants are advised that this dwelling unit has been supplied with a central air conditioning system which will allow windows and exterior doors to remain closed, thereby ensuring that the indoor sound levels are within the sound level limits of the Municipality and the Ministry of the Environment, Conservation and Parks. **Created :** 2018-11-23 10:52:45 **Last Modified :** 2019-01-07 02:49:42
8	PLAN REGISTRATION (SCHEDULE B)	Purchasers/tenants are advised that due to the proximity of the adjacent commercial buildings, noise from the commercial buildings may at times be audible. **Created :** 2018-11-23 11:01:53 **Last Modified :** 2019-01-07 02:49:42
9	PLAN REGISTRATION (SCHEDULE B)	The City of Mississauga does not require off-site snow removal. However, in the case of heavy snow falls the limited snow storage space available on the property may make it necessary to truck the snow off the site with all associated costs being borne by the registered property owner. **Created :** 2018-11-22 09:59:59 **Last Modified :** 2019-01-07 03:54:48
10	PLAN REGISTRATION (SCHEDULE C)	The owner shall contact the Development Engineering Section, Transportation and Works Department with respect to the procedure for the assignment of Public/Private Street names. **Created :** 2018-11-22 09:59:59 **Last Modified :** 2019-01-07 03:54:48
11	REGISTRATION	Schedules 'B' and 'C' of the Subdivision Agreement are to be determined through circulation by Development Services. The owner is to contact the Development Services Analysts at 905-615-3200 ext. 5523 or ext. 5528. **Created :** 2018-11-22 09:59:59 **Last Modified :** 2019-01-07 03:54:48
12	NOTE:	[OZ ADDRESSED UNDER T] An application has been filed for a Zoning By-law amendment under file OZ 18-016, W5 concurrently with an application for a Draft Plan of Subdivision T-M18005. Please note that this Department's detailed comments and conditions for the Rezoning Application will be addressed as part of the subject Draft Plan of Subdivision. **Created :** 2019-01-07 02:52:50 **Last Modified :** 2019-01-07 03:54:48

File: 21T-M 18 5
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TRANSPORTATION AND WORKS

DEVELOPMENT ENGINEERING REVIEW Contact: Cynthia Urdaneta Tel. (905) 615-3200 x3128

No	Milestone	Condition
13	NOTE:	[TIMING FOR SUBMITTING 1ST ENG. SUBMISSION] Please be advised that the City will NOT accept a First Engineering Submission in support of the required Subdivision Agreement for Municipal Infrastructure works Schedules 'D' and 'G' until such time as the Recommendation Report recommending Draft Plan Approval and the associated rezoning/OPA application has been approved in principle by City Council. **Created :** 2019-01-07 02:51:43 **Last Modified :** 2019-01-07 04:08:42
14	NOTE:	[CONDO/MULTI-FAMILY STANDARDS REFERENCE TO CITY'S STANDARDS] As these lands or any portion thereof be developed as a multi-family or condominium, the owner is advised that internal roads and services are to be constructed to meet the City's minimum condominium standards, (Section 6, Development Requirements Manual, Transportation and Works Department, City of Mississauga). http://www.mississauga.ca/portal/business/developmentrequirements **Created :** 2019-01-07 02:52:50 **Last Modified :** 2019-01-07 02:55:30
15	NOTE:	[CONDO REGISTRATION REQUIREMENTS] The owner is advised that as these lands are proposed as a condominium development, final grading and pavement structure certification will be required prior to condominium registration confirming that the aboveground site works as shown on the approved Site Plan has been installed to the satisfaction of the City. **Created :** 2019-01-07 02:52:50 **Last Modified :** 2019-01-07 02:55:30

TRANSPORTATION AND WORKS

DEVELOPMENT ENGINEERING REVIEW Contact: Cynthia Urdaneta Tel. (905) 615-3200 x3128

No	Milestone	Condition
16	NOTE:	[SHORING, TIE-BACKS, HOARDING REQUIREMENTS] In the event that placement of any shoring and tie-backs systems are to be proposed, the owner is to contact the Building Division and apply for a Permit for the required shoring on site. Please see the following link for more information: http://www.mississauga.ca/portal/residents/planexamination#PES7 Please note that a current, certified Utility Plan will be required with the Shoring Permit Application. A Utility Plan Terms of Reference can be found at the following link on Appendix C: http://www7.mississauga.ca/Departments/Marketing/documents/tw/Section-3A-Appendices-Dec-2018.pdf Prior to any work being carried out within the municipal right-of-way, the owner is to have their Road Occupancy Permit in place. For further information related to the Road Occupancy Permit, please contact the PUCC/ Permit Technologist, located at 3185 Mavis Road. The owner is further advised that an encroachment agreement may be required and that only tiebacks encroachments will be accepted (if any). **Created :** 2019-01-07 02:49:55 **Last Modified :** 2019-01-07 02:51:30
17	NOTE:	[UTILITY RELOCATION COSTS TO BE BORNE BY THE OWNER] The cost of any boulevard improvement/reinstatement, sidewalk and/or utility relocations as necessary to accommodate this development shall be borne by the owner. **Created :** 2019-01-07 02:51:43 **Last Modified :** 2019-01-07 02:52:36
18	NOTE:	[ROAD IMPROVEMENT COSTS TO BE BORNE BY THE OWNER] The cost for any/all road improvements required in support of this development application will be borne by the owner. **Created :** 2019-01-07 02:51:43 **Last Modified :** 2019-01-07 02:52:36

ENVIRONMENTAL ENG REV STORM Contact: Elizabeth Dollimore Tel. (905) 615-3200 x5303

No	Milestone	Condition

File: 21T-M 18 5
Proposal: 6 residential apartment buildings (up to 45 storeys) with grade related podiums, a public park and and amenity building

TRANSPORTATION AND WORKS

ENVIRONMENTAL ENG REV STORM Contact: Elizabeth Dollimore Tel. (905) 615-3200 x5303

No	Milestone	Condition
1	NOTE:	The storm sewer outlet for these lands is the existing 900mm diameter storm sewer system located on Eglinton Avenue East. In order to minimize the impact to existing drainage systems, it will be necessary to implement on-site storm water management techniques into the design and construction of the site works and services as necessary, to limit the 100 year post-development storm water discharge to the two year pre-development levels. **Created :** 2018-12-03 10:03:43 **Last Modified :** 2019-01-07 03:00:42
2	RECOMMENDATION REPORT	We are in receipt of the Functional Servicing and Stormwater Management Report, dated September 2018, prepared by Crozier Consulting Engineers, and provide the following comments: i) The pre development drainage plan and the post development drainage plan should have the same total area. ii) The storm sewer design sheet should include all uncontrolled areas. The area for Phase 3 on the design sheet does not currently include uncontrolled areas. iii) Show the location of the storage tanks and their capacities on the Servicing Plan iv) Indicate the orifice pipe sizing in the report v) Indicate the construction phasing of the storm sewers and stormwater management **Created :** 2018-12-03 10:03:43 **Last Modified :** 2019-01-07 03:00:42

TRANSPORTATION AND WORKS

ENVIRONMENTAL ENG REV STORM Contact: Elizabeth Dollimore Tel. (905) 615-3200 x5303

No	Milestone	Condition
3	PLAN REGISTRATION (SCHEDULE B)	The owner acknowledges that The Corporation of the City of Mississauga has implemented stormwater management policies intended to minimize the impact of development; and that it will be necessary to implement on-site stormwater management techniques in the design and construction of the site works and services, including but not limited to, rooftop storage and detention ponding in car parked and/or landscaped areas. The owner acknowledges that they will maintain the on-site stormwater management facilities and that they will not alter or remove these facilities without the prior written consent of The Corporation of the City of Mississauga. The owner hereby agrees to indemnify and save harmless The Corporation of the City of Mississauga from any and all claims, demands, suits, actions or causes of action as a result of, arising out of, or connected with any flooding of the lands subject to this agreement, with respect to the implementation of on-site stormwater management techniques incorporated into the design and construction of the site works and services. This indemnification and save harmless undertaking shall be binding upon the owner's successors and assigns. The owner acknowledges and agrees that all future purchase and sale agreements and all future lease agreements in connection with the subject lands, or any lot, part lot or other segment of the subject lands or of any residential development constructed on the subject lands, shall contain notice of the constraints on development of these lands described in this agreement, as well as notice of the indemnification and save harmless clause. **Created :** 2018-12-03 10:04:28 **Last Modified :** 2019-01-07 03:00:42
4	NOTE:	The City of Mississauga has adopted the Green Development Strategy and the corresponding Stage One Green Development Standards. As such, Applicants are required to implement sustainable technologies to manage stormwater on-site. In this regard, for an application of this nature, suitable techniques could include green roofs, infiltration trenches, stormwater re-use for landscape irrigation and/or permeable pavers. **Created :** 2018-12-03 10:04:28 **Last Modified :** 2019-01-07 03:00:42
5	NOTE:	Please be advised that the Stormwater Charge has come into effect as of January 2016. Credits of up to 50% are available for on-site stormwater management on non-residential and multi-residential properties. Learn more at www.stormwatercharge.ca. **Created :** 2018-12-03 10:04:28 **Last Modified :** 2019-01-07 03:00:42

File: 21T-M 18 5
Proposal: 6 residential apartment buildings (up to 45 storeys) with grade related podiums, a public park and and amenity building

TRANSPORTATION AND WORKS

ENVIRONMENTAL ENG REVIEWER Contact: Valeriya Danylova Tel. (905) 615-3200 x5930

No	Milestone	Condition
1	NOTE:	Based upon the review of the: -Environmental Site Screening Questionnaire and Declaration (ESSQD) for 91 Eglinton Avenue East, dated July 18, 2018 -Phase I Environmental Site Assessment (ESA) for 5055 Hurontario Street, dated January 29, 2018 -Fill Characterization- Test Pitting Program for 5055 Hurontario Street, dated May 8, 2018 -Phase II Environmental Site Assessment for 91 Eglinton Avenue East, dated August 23, 2017 The following comments are provided: **Created :** 2018-11-14 08:14:57 **Last Modified :** 2019-01-07 03:00:42
2	NOTE:	April 12, 2019: The ESSQD form, dated July 18th 2018, for 5055 Hurontario has been received. Previous: A completed ESSQD form (Rev. 2015-02-09) has been submitted for 91 Eglinton Avenue E, therefore a completed ESSQD form (Rev. 2015-02-09),signed by a Commissioner of Oaths and the owner must be submitted to the Transportation and Works Department for review, for 5055 Hurontario Street. **Created :** 2018-11-14 08:14:57 **Last Modified :** 2019-04-12 09:00:24
3	RECOMMENDATION REPORT	The Phase II ESA report for the property located at 91 Eglinton Avenue E indicated it must be read in conjunction with the Phase I ESA report. Therefore, the Phase I ESA report must be submitted to the Transportation and Works Department for review. The report must include a clause, or be accompanied by a letter signed by the report author or a Principal of the Consulting Firm, which allows the City of Mississauga to make reliance on the findings and conclusions presented. **Created :** 2018-11-14 08:14:57 **Last Modified :** 2019-01-07 03:00:42
4	RECOMMENDATION REPORT	The Phase I ESA (5055 Hurontario Street), Fill Characterization- Test Pitting Program report (5055 Hurontario Street) and Phase II ESA (91 Eglinton Avenue E) must include a clause or be accompanied by a letter signed and sealed by the author of the report or a Principal of the Consulting Firm, which allows the City of Mississauga to make reliance on the findings and conclusions presented in the report. The wording of the reliance must meet the City's satisfaction. Please contact Valeriya.danylova@mississauga.ca to obtain a template. **Created :** 2018-11-14 08:14:57 **Last Modified :** 2019-01-07 04:05:31

TRANSPORTATION AND WORKS

ENVIRONMENTAL ENG REVIEWER

Contact: Valeriya Danylova Tel. (905) 615-3200 x5930

No	Milestone	Condition
6	RECOMMENDATION REPORT	The ESSQD and Phase II ESA indicated the presence of monitoring wells on the property 91 Eglinton Avenue E. A written document, prepared by a Professional Engineer, must be provided to the satisfaction of the Transportation and Works Department which includes a plan to decommission the wells or proof of decommissioning if already completed. The document should reference all applicable guidelines and regulations, including Ontario Water Resources Act Regulation 903 (formerly 612/84) and should provide details as to when during the development process the well(s) will be decommissioned. **Created :** 2018-11-14 08:14:57 **Last Modified :** 2019-02-13 03:35:56
7	RECOMMENDATION REPORT	The proposed buildings may require that the proposed excavation be extended to a depth significantly below the water table. Therefore, please provide your dewatering plan to the Transportation and Works Department for review. In addition, indicate the dewatering procedure for ballast water accumulation (e.g. rainwater). **Created :** 2018-11-14 08:14:57 **Last Modified :** 2019-02-13 03:35:56
8	RECOMMENDATION REPORT	The aerial images indicate that the existing buildings or structures on site are to be demolished or have been demolished. Therefore, written confirmation that all debris, including foundations of the previously existing structures, have been removed in accordance with all applicable guidelines and regulations. The document must be signed and sealed by a Qualified Person (as defined by O. Reg. 153/04, as amended). **Created :** 2018-11-14 08:37:53 **Last Modified :** 2019-02-13 03:35:56
11	NOTE:	Phase II ESA has been received for 91 Eglinton Avenue East which indicates that the site meets Table 6 requirements. **Created :** 2018-11-14 08:14:57 **Last Modified :** 2019-02-13 03:35:56
12	NOTE:	Further comments may be provided upon review of the requested materials. **Created :** 2018-11-14 08:14:57 **Last Modified :** 2019-02-13 03:35:56

TRAFFIC REVIEW (PPP)

Contact: Gregory Borys Tel. (905) 615-3200 x3597

No	Milestone	Condition

File: 21T-M 18 5
Proposal: 6 residential apartment buildings (up to 45 storeys) with grade related podiums, a public park and and amenity building

TRANSPORTATION AND WORKS

TRAFFIC REVIEW (PPP)

Contact: Gregory Borys Tel. (905) 615-3200 x3597

No	Milestone	Condition
1	RECOMMENDATION REPORT	This department is in receipt of a Traffic Impact Study dated September 11, 2018 by WSP and have the following comments: a) Extension of Belbin Street from Armdale Road to Eglinton Avenue is a requirement; b) Complete All-Way-Stop warrants for Thornwood Drive at Armdale Road for 2023 and 2028 future conditions; c) 4.2.1 Corridor Traffic Growth: Based on Appendix G, WSP requested growth rates for Hurontario Street from Elm Drive to Fairview Road and Central Parkway West, west of Hurontario. However, Table 4.2 uses Eglinton Avenue Projected Future Growth Rates. Confirm if those growth rates were provided by the City; d) 4.2.1 Corridor Traffic Growth: Table 4.1 growth rates do not match up to the rates provided in Appendix G from the City of Mississauga; e) Comments regarding parking requirements and parking justification for a reduction in parking spaces will be provided by the Development Application Planner on file; f) 9.0 Transportation Demand Management: It should be noted that the City of Mississauga does not issue Pre-loaded PRESTO cards, all costs associated with TDM initiatives are to be borne by the developer; g) Further updates to the Traffic Impact Study may be required based on any changes to the Site Plan or through the Public Consultation Process. **Created :** 2018-12-19 02:08:41 **Last Modified :** 2019-01-07 03:00:42

TRANSPORTATION AND WORKS

TRAFFIC REVIEW (PPP) Contact: Gregory Borys Tel. (905) 615-3200 x3597

No	Milestone	Condition
2	RECOMMENDATION REPORT	This department is in receipt of a Technical Memo dated June 15, 2018 by WSP in regards to the Belbin Street extension and have the following comments: (a) The road network for Year 2023 within the proximity of Belbin Street/Armdale Rd has NOT been properly assumed. Based on the approved Summit Eglinton development and 8 Nahani Way, Belbin Street will be extended northerly to Nahani Way. As a result, the future road network shall include the intersections of Nahani Way at Hurontario St; Belbin St at Nahani Way; and Belbin St at Preston Meadow Ave; (b) Intersection operations at Eglinton Ave and Hurontario St are anticipated to deteriorate greatly due to LRT operations and adjacent high-density developments. As such, the City's long-term vision is to have Belbin St stretched from Eglinton Ave to Nahahi Way in order to alleviate traffic congestions in this area. This study contains an alternative scenario with the extension of Belbin St (to Eglinton Ave) and concludes that the extension is NOT required from an operational perspective. However, we consider that the traffic analysis presented in the study is NOT sufficient to justify this conclusion due to the following factors: - The background traffic development with respect to the road network with the Belbin St extension (to Eglinton Ave) is concerning. Comparison of Figure 3-5 (w/o extension) and Figure 3-6 (with extension) suggest that only the trips on Thornwood Drive and Forum Drive were diverted onto the Belbin St extension. Staff notes that the diverted Belblin St trips shall come from all parallel streets including Hurontario Street, especially given the anticipated delays at Hurontario St/ Eglinton Ave. (e.g. the AM WBR movement will experience approximately 400s delay in the future.) - The AM VISSIM model volumes (provided by the City) at Eglinton Ave /Hurontario St are approximately 35%-40% higher than the utilized background traffic volumes based on City's grow rates. The study should clarify the resulted deviations on the capacity analysis. - Queuing analysis for the intersection of Eglinton Ave and Hurontario Street shall be included and referenced in the discussion of Other Operational and Functional Issues (Page 35). - City may undertake a modeling exercise to obtain accurate trip redistribution as a result of the Belbin St extension and direct its use in this traffic impact study. (c) Pinnacle is currently seeking to amend the previous approval to allow for an increase of 1,140 units (File # OZ 18-11) over the existing permission (2,095 units). The increase of 1,140 units shall be accounted for in the alternative scenario; (d) Traffic volume diagrams for background developments shall be provided separately from the total background traffic diagrams; (e) Phasing description of the subject development shall be included; **Created :** 2018-12-19 02:48:37 **Last Modified :** 2019-01-07 04:05:31

File: 21T-M 18 5
Proposal: 6 residential apartment buildings (up to 45 storeys) with grade related podiums, a public park and and amenity building

TRANSPORTATION AND WORKS

TRAFFIC REVIEW (PPP) Contact: Gregory Borys Tel. (905) 615-3200 x3597

No	Milestone	Condition
3	RECOMMENDATION REPORT	- The Belbin Street road extension from Armdale Road to Eglinton Avenue East is a requirement, revise Site Plan accordingly - The applicant is to ensure convenient and safe pedestrian linkage is provided within the development site, specifically connecting pedestrians from Tower A/B/G to the proposed public park through the use of pavement markings, signage and the Ontario Traffic Manual - Book 15; - Clarify the vertical clearance for the loading/parking entrances; - The site plan shall be revised to: a. Dimension the existing driveway width at the street line, and the proposed driveway width at the property line and the street line to determine the width(s) of curb works required. b. Identify the portions of the municipal sidewalk and curb across the proposed access as Heavy Duty. c. Dimension the entrance curb radii and make reference to O.P.S.D. 350.010. d. Indicate the municipal curb and sidewalk continuous through the driveway. e. Delete the portion of curb and sidewalk through the access at the controlled intersection, therefore being constructed to local roadway standards - remove portions of private curbing proposed within the municipal boulevard, or between the municipal sidewalk and curb as applicable. **Created :** 2018-12-19 02:39:32 **Last Modified :** 2019-01-07 03:14:15
4	NOTE:	The applicant is advised that based on the profile, size and density of the proposed development, Transportation & Works may retain a peer reviewer for the Traffic Impact Study through the use of our Fees and Charges By-Law (By-Law 155-17) to be paid for by the applicant. **Created :** 2018-12-12 03:21:01 **Last Modified :** 2019-01-07 03:00:42
5	NOTE:	Extension of Belbin Street from Armdale Road to Eglinton Avenue East is a requirement for proposed development. - As outlined in the Section 8.2.2.3 and 9.3.1.5 of the Offical Plan, the City will strive to create a fine-grade system of roads that seek to increase the number of road intersections and overall connectivity throughout the city; - Section 8.2.2.7 of the Official Plan states, Future additions to the road network should be public roads. Public easements may be required where private roads are permitted; - Through consultation with Mississauga Fire, extension of Belbin Street to Eglinton Avenue East is necessary for emergency purposes **Created :** 2018-12-19 02:48:37 **Last Modified :** 2019-02-05 05:05:35

TRANSPORTATION AND WORKS

TRAFFIC REVIEW (PPP) Contact: Gregory Borys Tel. (905) 615-3200 x3597

No	Milestone	Condition
6	NOTE:	- The portion of the driveway within the municipal boulevard is to be paved by the applicant - All landscaping and grading within close proximity to the proposed access points is to be designed to ensure that adequate sight distances are available for all approaching and exiting motorists and pedestrians; - All damaged or disturbed areas within the municipal right-of-way are to be reinstated at the applicant's expense; - The applicant will be required to submit an Access Modification Permit (https://www.mississauga.ca/portal/services/twformscentre) **Created :** 2018-12-06 03:21:58 **Last Modified :** 2019-02-05 05:06:58

COMMUNITY SERVICES

PLANNER - COMM SERVICES Contact: Michael Hynes Tel. (905) 615-3200 x4409

No	Milestone	Condition

File: 21T-M 18 5
Proposal: 6 residential apartment buildings (up to 45 storeys) with grade related podiums, a public park and and amenity building

COMMUNITY SERVICES

PLANNER - COMM SERVICES Contact: Michael Hynes Tel. (905) 615-3200 x4409

No	Milestone	Condition
1	INFO REPORT	INFORMATION REPORT The following comments shall be included in the Planning and Building Department Information Report: January 9, 2019 (Note to D&D Planner: Should six months lapse prior to writing of the report, please contact the Community Services Planner assigned to this application to update the following) Proposed Park Block 3, having an area of 0.33 ha (0.8 ac.) along Armdale Road is an inappropriate location for a park. Given the amount of height and density surrounding this proposed park, the park will be in shadow the entire day between March 21st and September 21st. There will also be a significant shadow impact on June 21st. Please address the shadow impacts by relocating the park and/or through design solutions. Sandalwood Park (P-309), zoned OS1, located on the north side of Nahani Way, east of the subject lands, which is less than 400 m (1312 ft.) from the subject lands. This 1.86 ha (4.60 acre) park contains a playground and an 11v11 soccer field. Given the limited number of parks within the immediate area and the proposed density and units being requested, Community Services will request a park on the subject lands to service this development and immediate area. Based on the proposed size and location of the park, cash-in-lieu and parkland dedication will be required pursuant to Section 42 of the Planning Act (R.S.O. 1990, c.P. 13, as amended) and in accordance with City Policies and By-laws. **Created :** 2018-11-25 01:24:24 **Last Modified :** 2019-02-13 12:23:14

COMMUNITY SERVICES

PLANNER - COMM SERVICES

Contact: Michael Hynes Tel. (905) 615-3200 x4409

No	Milestone	Condition
2	INFO REPORT	Proposed Park Block 3 having (0.3245 ha) (0.800 ac) along Street "B" (Armdale Road) is an inappropriate location for a park given the amount of height and denisty surrounding this proposed park will cause the proposed park to be in shadow the entire day during the March 21 and September 21 Solstice. The June 21 soclitice will also have a signficant impact on shadowing of the Proposed Park. Here are the heights of the buildings that are proposed to surround this park: Tower A - 45 storeys - southeast corner of site Tower B - 40 storeys - south center of site abutting Eglinton Tower D - 33 storeys - abutting the site southeast corner Tower E - 40 soreys - southwest of proposed park Tower F - 35 storeys - just west of the proposed park The accumulative affect of the shadows from Towers A through Towers F will have the park in shadow the entire day. Community Services will not accept the location of this park. Community Servies would request that this Proposed Park be relocated to a location on-site where shadow is not fully impacted by the proposed location of these Towers. **Created :** 2018-11-25 02:01:23 **Last Modified :** 2019-02-21 02:34:11
3	INFO REPORT	Community Services has reviewed the preliminary pedestrian level wind study undertaken by Theakston Environmental within the Proposed Park and found the results to be not acceptable. Please revise the wind analysis to include when all phases are built and the impact of wind within the Proposed Park while sitting, standing and walking for Winter and Spring. Community Services will provide additional comments once we have recieved an updated wind study on the impact on the Proposed Park. **Created :** 2018-11-25 02:01:23 **Last Modified :** 2019-02-07 06:50:00
4	REGISTRATION	STREET TREE PAYMENT Payment in cash or certified cheque will be required to cover the cost of planting street trees, up to 60 mm caliper, on Armdale Road in accordance with current City standards. The frontage along Armdale is approximately 200 m (1 tree for every 10 m) equals 20 trees at 574.50 per tree. A street tree payment will be $11,490.00. **Created :** 2018-11-25 01:24:24 **Last Modified :** 2019-02-21 02:34:11
5	RECOMMENDATION REPORT	UTILITY EASEMENT/BLOCKS The applicant is to confirm whether there is a requirement to locate utility cabinets (i.e. Hydro / Bell) on the subject lands. If they are required, the locations are to be shown on the draft plan of subdivision and identified as a separate block. These utility blocks are discouraged from being located next to park blocks. **Created :** 2018-11-25 01:24:24 **Last Modified :** 2018-11-30 11:35:44

File: 21T-M 18 5
Proposal: 6 residential apartment buildings (up to 45 storeys) with grade related podiums, a public park and and amenity building

COMMUNITY SERVICES

PLANNER - COMM SERVICES

Contact: Michael Hynes Tel. (905) 615-3200 x4409

No	Milestone	Condition
6	INFO REPORT	Please see LA-DD comments Re; Joint Utility Trench for Thornwood Drive and Eglinton Avenue East **Created :** 2018-11-28 03:54:35 **Last Modified :** 2018-11-30 11:35:44
7	RECOMMENDATION REPORT	PARK CONCEPT PLAN The developer shall submit concept plans for all dedicated land, for park or other public recreational purposes to the satisfaction of the Community Services Department - Park Planning Section. All plans shall be submitted at a scale of 1:500 unless otherwise specified. **Created :** 2018-11-25 01:24:24 **Last Modified :** 2018-11-30 11:35:44
10	RECOMMENDATION REPORT	CASH IN LIEU OF PARKLAND - DRAFT PLAN CONDITION The following shall not be listed as a draft plan condition but included under the NOTE section. NOTE: The City has not required either the dedication of land for park or other public recreational purposes, or a payment of money in lieu of such conveyance as a condition of subdivision draft approval authorized by Section 51.1 of the Planning Act, R.S.O. 1990, c.P.13 as amended. The City will require payment of cash-in-lieu for park or other public recreational purposes as a condition of development for each lot and block, prior to the issuance of building permits pursuant to Section 42(6) of the Planning Act, R.S.O. 1990, c.P.13, as amended, and in accordance with the City's policies and by-laws. **Created :** 2018-11-25 01:24:24 **Last Modified :** 2019-02-07 06:50:00
11	1ST SERVICING SUB	PARKLAND REQUIREMENTS SATISFIED The following clause shall be included in the Subdivision Agreement, Schedule D. The land dedication for park or other public recreational purposes requirement for application T-18005 has been satisfied through Registered Plan M-_____. **Created :** 2018-11-25 01:24:24 **Last Modified :** 2019-02-07 06:50:00
12	SERV AND/OR DEV. AGT	WARNING CLAUSE REQUIRED - RECREATIONAL USES A warning clause shall be entered into the Development Agreement - Schedule B and into all Offers of Purchase and Sale, as well as registered on the titles of all lots and blocks, advising potential purchasers that the adjacent park will contain active recreational facilities will contain a _____. **Created :** 2018-11-25 01:28:39 **Last Modified :** 2019-02-21 02:34:11

COMMUNITY SERVICES

PLANNER - COMM SERVICES

Contact: Michael Hynes Tel. (905) 615-3200 x4409

No	Milestone	Condition
13	SERV AND/OR DEV. AGT	A warning clause shall be entered into Schedule B of the Servicing Agreement and into all Offers of Purchase and Sale, as well as registered on the titles of (list all residential lots/blocks abutting parkland), advising potential purchasers that snow storage is not permitted on the City Park Block. **Created :** 2018-11-25 01:36:39 **Last Modified :** 2019-02-21 02:34:11
14	SERV AND/OR DEV. AGT	SCHEDULE D-2 REQUIRED A Schedule D-2 detailing the park development works and associated costs and securities is required including rough grading, site servicing, water, sanitary and electric. **Created :** 2018-11-25 01:28:39 **Last Modified :** 2019-02-21 02:34:11
17	SERV AND/OR DEV. AGT	LEGAL DESCRIPTIONS REQUIRED Legal descriptions of all lands to be deeded to the City as parkland shall be listed in Schedule B of the Servicing Agreement. **Created :** 2018-11-25 01:28:39 **Last Modified :** 2018-11-30 11:35:44
19	SERV AND/OR DEV. AGT	The following clause shall be entered into the Development Agreement - Schedule B: 1. Community Services Department a) Prior to the issuance of building permits for all lots and blocks within the plan of subdivision, satisfactory arrangements shall have been made with the Planning and Heritage Section of the Community Services Department and the Realty Services Section of the Corporate Services Department with respect to the payment of cash-in-lieu for park or other public recreational purposes. The owner is advised that the City will require the payment of cash-in-lieu for park or other public recreational purposes as a condition of development prior to the issuance of building permits, and valued as of the day before the day of building permit issuance pursuant to Section 42(6) of the Planning Act and City of Mississauga by-laws and policies. **Created :** 2018-11-25 01:28:39 **Last Modified :** 2018-11-30 11:35:44
21	NOTE:	SITE PLAN REQUIRED Site plans for blocks (block numbers) which abut existing or proposed parkland or greenbelt / woodland (location) shall be forwarded to the Community Services Department - Park Planning Section for review and comment. **Created :** 2018-11-25 01:28:39 **Last Modified :** 2019-02-07 06:50:00

LANDSCAPE ARCH - COMM SERVICES

Contact: Tel.

File: 21T-M 18 5
Proposal: 6 residential apartment buildings (up to 45 storeys) with grade related podiums, a public park and and amenity building

COMMUNITY SERVICES

LANDSCAPE ARCH - COMM SERVICES

Contact: Tel.

No	Milestone	Condition
1	SERV AND/OR DEV. AGT	WARNING CLAUSE - ENCROACHMENTS Purchasers are advised that any encroachments of the municipally-owned public lands including parkland, greenbelts and woodlands, is illegal under Encroachment By-law 0057-2004, which states: "No person shall erect, place or maintain, or cause to be erected, placed or maintained an encroachment of any kind on public lands, or on any right-of-way or easement in favour of the City". The By-law defines an encroachment as "any type of vegetation, man-made object or item of personal property of a person which exists wholly upon, or extends from a person's premises onto, public lands and shall include any aerial, surface or subsurface encroachments". **Created :** 2018-11-28 01:44:14 **Last Modified :** 2018-12-03 10:48:03
2	SERV AND/OR DEV. AGT	WARNING CLAUSE - STREET TREES The following warning clauses are to be included in the Development Agreement - Schedule B for plans of subdivision and subsequently in the Agreements of Purchase and Sale for new homes, as applicable: PLANTING BY THE CITY a. "Purchasers are advised that, despite the payment of monies by the developer to the City of Mississauga for street tree planting, site conditions may prevent the planting of a street tree within the public right-of-way in front of this lot. Purchasers are further advised that the City will not reimburse purchasers for any payments made by the purchaser to the vendor for street tree planting should a tree not be planted within the public right-of-way in front of this lot." b. "Purchasers are advised that the City of Mississauga has no jurisdiction over the monies charged by the vendor to the purchaser for street tree planting." c. "Purchasers are advised that site conditions may require that a street tree is planted within the private lot rather than within the public right-of-way." d. "Purchasers are advised that the current Fee Charges By-Law permits the charge of $___ per street tree, up to 60mm caliper." **Created :** 2018-11-28 01:44:14 **Last Modified :** 2018-12-03 10:48:03

COMMUNITY SERVICES

LANDSCAPE ARCH - COMM SERVICES

Contact: Tel.

No	Milestone	Condition
3	1ST SERVICING SUB	PARK MASTER PLAN A master plan for all dedicated parkland shall be submitted to, and approved by, the Community Services Department - Park Planning Section. All plans shall be submitted at a scale of 1:500 unless otherwise specified. The master plan is to be prepared by a certified landscape architect. All proposed sanitary, storm and/or utility easements (hydro, gas, water bell, cable, etc.) and/or stormwater management facilities shall be indicated on the park master plan and approved by the Community Services Department - Park Planning Section, in order that such easements do not compromise park development plans. All other utility structures are discouraged from being located in the park block. **Created :** 2018-11-28 01:44:14 **Last Modified :** 2018-12-03 10:50:45
4	1ST SERVICING SUB	PARK DEVELOPMENT BY CITY The Community Services Department will construct the park block associated with this Subdivision. A Master Plan and unit quantities are required at second engineering submission for review and approval prior to final submission for registration. **Created :** 2018-11-28 01:44:14 **Last Modified :** 2018-12-03 10:50:45
6	REGISTRATION	ESA/RSC REQUIRED PRIOR TO PARKLAND DEDICATION Prior to parkland/greenbelt/woodlot/open space dedication to a conservation authority or the City, the applicant is to provide written confirmation that Transportation and Works has received and approved the Phase 1 and Phase 2 (if required) Environmental Site Assessment Report (ESA), together with a Record of Site Condition (RSC) for these dedicated lands. Both sets of documents are to be prepared, signed, dated and sealed by a Professional Engineer (P.Eng.). Please note that the final ESA report is to include a statement confirming the suitability of the conveyed lands for the intended parkland use. Also, note that the reports are to include a clause, or be accompanied by a signed letter from the author of the report, or a Principal of the Consulting Firm, which allows the City of Mississauga to make reliance on the findings and conclusions presented in the report. **Created :** 2018-11-28 01:44:14 **Last Modified :** 2018-12-03 10:50:45

BELL CANADA

BELL CANADA

Contact: Tel.

File: 21T-M 18 5
Proposal: 6 residential apartment buildings (up to 45 storeys) with grade related podiums, a public park and and amenity building

BELL CANADA

BELL CANADA

Contact: Tel.

No	Milestone	Condition
1	DRAFT APPR	We have reviewed the circulation regarding the above noted application. The following paragraph is to be included as a condition of approval: "The Owner shall indicate in the Agreement, in words satisfactory to Bell Canada, that it will grant to Bell Canada any easement that may be required, which may include a blanket easement, for communication/telecommunication infrastructure. In the event of any conflict with existing Bell Canada facilities or easements, the Owner shall be responsible for the relocation of such facilities or easements." We hereby advise the Developer to contact Bell Canada during detailed design to confirm the provision of communication/telecommunication infrastructure needed to service the development. As you may be aware, Bell Canada is Ontario's principal telecommunications infrastructure provider, developing and maintaining an essential public service. It is incumbent upon the Municipality and the Developer to ensure that the development is services with communication/telecommunication infrastructure. In fact, the 2014 Provincial Policy Statement (PPS) requires the development of coordinated, efficient and cost-effective infrastructure, including telecommunications system (Section 1.6.1) The Developer is hereby advised that prior to commencing any work, the Developer must confirm that sufficient wire-line communication/telecommunication infrastructure is available. In the event that such infrastructure is unavailable, the Developer shall be required to pay for the connection to and/or extension of the existing communication/telecommunication infrastructure If the Developer elects not to pay for the above noted connection, then the Developer will be required to demonstrate to the satisfaction of the Municipality that sufficient alternative communication/telecommunication will be provided to enable, at a minimum, the effective delivery of communication/telecommunication services for emergency management services (i.e. 911 Emergency Services). CONTACT: Meaghan Palynchuk Urban Planner, Municipal Relations Access Network Provisioning, Ontario Phone 905-540-7254 Mobile: 289-527-3953 Email: Meaghan.Palynchuk@bell.ca **Created :** 2019-01-11 12:14:08 **Last Modified :** 2019-02-06 04:25:45

CANADA POST CORPORATION

CANADA POST CORPORATION

CANADA POST CORPORATION Contact: Tigist Yage Tel. (416) 606-8372

No	Milestone	Condition

File: 21T-M 18 5
Proposal: 6 residential apartment buildings (up to 45 storeys) with grade related podiums, a public park and and amenity building

CANADA POST CORPORATION

CANADA POST CORPORATION Contact: Tigist Yage Tel. (416) 606-8372

No	Milestone	Condition
1	NOTE:	October 30, 2018 Re: Application No: 21T-M 18 5 NW HURONTARIO ST AND EGLINTON AVE EAST Canada Post Corporation appreciates the opportunity to comment on the above noted application and it is requested that the developer be notified of the following: In order to provide mail service to the residential building(s) for this development, Canada Post requests that the owner/developer comply with the following conditions: The owner/developer will provide each building with its own centralized mail receiving facility. This lock-box assembly must be provided and maintained by the Owner/Developer in order for Canada Post to provide mail service to the residents of this project. For any building where there are more than 100 units, a secure, rear-fed mailroom must be provided. The owner/developer agrees to provide Canada Post with access to any locked doors between the street and the lock-boxes via the Canada Post Crown lock and key system. This encompasses, if applicable, the installation of a Canada Post lock in the building's lobby intercom and the purchase of a deadbolt for the mailroom door that is a model which can be retro-fitted with a Canada Post deadbolt cylinder. As per our revised National Delivery Policy, street level residences and businesses will also receive mail delivery at centralized locations, not directly to their door. For example: - extra mail compartments can be provided to accommodate these units in the main mailbox panel - if these units are not part of the condo then a separate centralized mail receiving facility/box can be set up by the developer at an alternative location. As the project nears completion, it is requested that the Developer contact me directly for a Postal Code as existing postal coding will not apply and new postal codes will be issued for this development. The Developer's agent should contact a Delivery Supervisor , Mississauga Depot 6 Post office Supervisor, Phone number 905-501-0358 for mailroom/lock box inspection and mail delivery startup. The complete guide to Canada Post's Delivery Standards can be found at: https://www.canadapost.ca/cpo/mc/assets/pdf/business/standardsmanual_en.pdf

CANADA POST CORPORATION

CANADA POST CORPORATION Contact: Tigist Yage Tel. (416) 606-8372

No	Milestone	Condition
1	NOTE:	Tigist Yage Delivery Planning Officer - GTA West tigist.yage@canadapost.ca **Created :** 2018-10-30 11:00:40 **Last Modified :** 2019-02-06 04:27:05

ENDBRIDGE/CONSUMERS GAS

ENBRIDGE Contact: Municipal Planning Tel. (416) 495-5763

No	Milestone	Condition
1	NOTE:	Enbridge Gas Distribution does not object to the proposed application(s). **Created :** 2018-11-01 09:40:48 **Last Modified :**
2	NOTE:	This response does not constitute a pipe locate or clearance for construction. **Created :** 2018-11-01 09:40:49 **Last Modified :**
3	NOTE:	The applicant shall contact Enbridge Gas Distribution's Customer Connections department by emailing SalesArea20@enbridge.com for service and meter installation details and to ensure all gas piping is installed prior to the commencement of site landscaping (including, but not limited to: tree planting, silva cells, and/or soil trenches) and/or asphalt paving. **Created :** 2018-11-01 09:40:49 **Last Modified :** 2018-12-12 02:43:04
4	NOTE:	If the gas main needs to be relocated as a result of changes in the alignment or grade of the future road allowances or for temporary gas pipe installations pertaining to phase construction, all costs are the responsibility of the applicant. **Created :** 2018-11-01 09:40:49 **Last Modified :**
5	NOTE:	Easement(s) are required to service this development and any future adjacent developments. The applicant will provide all easement(s) to Enbridge Gas Distribution at no cost. **Created :** 2018-11-01 09:40:49 **Last Modified :**
6	NOTE:	The applicant will contact Enbridge Gas Distribution's Customer Connections department by emailing SalesArea20@enbridge.com prior to any site construction activities to determine if existing piping facilities need to be relocated or abandoned. **Created :** 2018-11-01 09:40:49 **Last Modified :** 2018-12-12 02:43:04

File: 21T-M 18 5
Proposal: 6 residential apartment buildings (up to 45 storeys) with grade related podiums, a public park and and amenity building

ENDBRIDGE/CONSUMERS GAS

ENBRIDGE Contact: Municipal Planning Tel. (416) 495-5763

No	Milestone	Condition
7	NOTE:	In the event a pressure reducing regulator station is required, the applicant is to provide a 3 metre by 3 metre exclusive use location that cannot project into the municipal road allowance. The final size and location of the regulator station will be confirmed by Enbridge Gas Distributions Customer Connections department. For more details contact SalesArea20@enbridge.com. **Created :** 2018-11-01 09:40:49 **Last Modified :** 2018-12-12 02:58:10
8	NOTE:	The applicant will grade all road allowances to as close to final elevation as possible, provide necessary field survey information and all approved municipal road cross sections, identifying all utility locations prior to the installation of the gas piping. **Created :** 2018-11-01 09:40:49 **Last Modified :**
9	NOTE:	Enbridge Gas Distribution reserves the right to amend or remove development conditions. **Created :** 2018-11-01 09:40:49 **Last Modified :**

DUFFERIN-PEEL CATHOLIC SB

DUFFERIN PEEL CD SCHOOL BOARD Contact: Joanne Rogers Tel. (905) 890-0708 x4299

No	Milestone	Condition
1	NOTE:	With respect to the schools currently accommodating students from this area, the above noted application is located in the elementary catchment area of St Jude Elementary School, and proposes a total of 2580 additional units, yielding approximately 43 Junior Kindergarten to Grade 8 separate school student. St Jude Elementary School has a capacity of 280 pupil places plus 475 pupil places in temporary accommodation, with a current enrolment of 431 students and 0 portables/temporary classrooms on site. The application will yield approximately 36 Grade 9 to 12 separate school students. This application is located in the secondary catchment area of St Francis Xavier Secondary School, which has a capacity of 1500 pupil places with a current enrolment of 1877 students, and 17 portables/temporary classrooms on site. **Created :** 2018-11-13 11:30:17 **Last Modified :** 2018-12-12 04:06:58
2	NOTE:	Based on the Dufferin-Peel Catholic District School Board's School Accommodation Criteria, the Board is satisfied with the current provision of educational facilities for the catchment area in which the subject application is located. The City of Mississauga school accommodation condition need not be applied. **Created :** 2018-11-13 11:30:17 **Last Modified :**

DUFFERIN-PEEL CATHOLIC SB

DUFFERIN PEEL CD SCHOOL BOARD Contact: Joanne Rogers Tel. (905) 890-0708 x4299

No	Milestone	Condition
3	PLAN REGISTRATION (SCHEDULE B)	The Board requests that the following conditions be fulfilled prior to the final approval of the zoning by-law: 1. That the applicant shall agree in the Servicing and/or Subdivision Agreement to include the following warning clauses in all offers of purchase and sale of residential lots until the permanent school for the area has been completed. (a) "Whereas, despite the best efforts of the Dufferin-Peel Catholic District School Board, sufficient accommodation may not be available for all anticipated students from the area, you are hereby notified that students may be accommodated in temporary facilities and/or bussed to a school outside of the neighbourhood, and further, that students may later be transferred to the neighbourhood school." (b) "That the purchasers agree that for the purpose of transportation to school, the residents of the subdivision shall agree that children will meet the bus on roads presently in existence or at another place designated by the Board." **Created :** 2018-11-13 11:30:17 **Last Modified :**

GREATER TORONTO AIRPORT AUTH

GREATER TORONTO AIRPORT AUTH Contact: Greg Straatsma Tel. (416) 776-3536

No	Milestone	Condition

File: 21T-M 18 5
Proposal: 6 residential apartment buildings (up to 45 storeys) with grade related podiums, a public park and and amenity building

GREATER TORONTO AIRPORT AUTH

GREATER TORONTO AIRPORT AUTH Contact: Greg Straatsma Tel. (416) 776-3536

No	Milestone	Condition
1	RECOMMENDATION REPORT	2018-Nov-14; SP 18-016 W5; 91 Eglinton Avenue East & 5055 Hurontario Street; Airport Zoning Restrictions: According to the Airport Zoning Regulations for Toronto's Lester B. Pearson International Airport, development elevations on the property are not affected by any airport restrictions related to obstacle zoning. NAV CANADA Review & Request for Additional Information: As the proposed development is located within close proximity to Toronto Pearson Airport, the development could impact on NAV CANADA's instrument runway approach procedures. In order to determine if the proposed residential towers would comply with the Airport's runway approach procedures, the GTAA and NAV CANADA will need to conduct a detailed evaluation of the proposed development and therefore the following additional information is required: 1) The geographic coordinates of the four outside corners of each proposed building. The coordinates would be based upon 6 degrees UTM (Universal Transverse Mercator expressed in metres) (Zone 17); NAD 27 - 1974 adjustment (horizontal); GSC-1978 Southern Ontario adjustment (vertical); 2) Building elevation drawings showing the full height of the structures including any rooftop units such as a/c units, ladders, railings, etc. 3) The materials to be used on the outside walls of the building. Once a more complete development proposal becomes available, please circulate it to us for our review and submission to NAV Canada. GTAA, 416-776-3635, Greg.Straatsma@GTAA.com **Created :** 2018-11-14 11:09:36 **Last Modified :** 2019-02-06 04:48:52

ENERSOURCE HYDRO MISS

ENERSOURCE HYDRO MISS Contact: Marilou Ignacio Tel. (905) 283-4088

No	Milestone	Condition

ENERSOURCE HYDRO MISS

ENERSOURCE HYDRO MISS Contact: Marilou Ignacio Tel. (905) 283-4088

No	Milestone	Condition
1	NOTE:	7Dec2018: We have no objection to the rezoning of these lands. Our comments are as follows: - Initial supply could be made available subject to timing, prior use and coordination with adjacent lands. - Any electrical servicing/alterations shall be in accordance with Alectra's requirements. - The applicant is requested to contact Alectra well in advance to arrange for the design and installation of the electrical distribution system. - An 'Offer to Connect' will be made for the above development that is in consistent with the rules outlined in Chapter 3 of the Ontario Energy Board's Distribution System Code. - All on grade hydro equipment that will be located within the property will be required vehicle access at all times (i.e. driveway minimum 3.0m wide) and cannot be located top of any other structure, such as underground parking garage. - Servicing to the proposed development can be made available through a pad-mounted transformers or vault type transformers. For supply from a pad-mounted transformer, location of the pad has to be at least 1.5 m from the building and cannot be located top of any other structure, such as underground parking garage. The electrical room is required at grade level. For a vault amounted installation, the vault room is required at the grade level. - On above grade pad mounted switchgear will need to be installed at customer's property. For Alectra operational purposes, any proposed landscaping, retaining walls and /or structure near the hydro equipment location must meet required clearances for safe operation and maintenance by Alectra crews. - For Alectra operational purposes, any proposed landscaping, retaining walls and/or structure near the pad-mounted hydro equipment location must meet required clearances for safe operation and maintenance by Alectra crews. - Before approving this application, the applicant is to contact Alectra Engineering Technician, to provide information regarding the hydro service requirement. - If the proposed development is supplied by a pad-mounted transformer, an above grade pad-mounted switchgear will need to be installed by customer's property. For Alectra operational purposes, any proposed landscaping, retaining walls and/or structure near the hydro equipment location must meet required clearances for safe operation and maintenance by Alectra crews. - All above grade hydro equipment that will be located within the property will require vehicle access at all times (i.e. driveway minimum 3.0 m wide). For Alectra operational purposes, any proposed landscaping, retaining walls and/or structure near the hydro equipment location must meet required clearances for safe operation and maintenance by Alectra crews. - Vault type transformers installed inside transformer vault room located on grade will be needed to provide hydro supply to these developments (the proposed High-Rise Condominium Development). - Please note that the Alectra Field Inspector will determine if bollards for projection are also required. A minimum clearance between any hydro equipment and any

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ENERSOURCE HYDRO MISS

ENERSOURCE HYDRO MISS Contact: Marilou Ignacio Tel. (905) 283-4088

No	Milestone	Condition
1	NOTE:	openings for building doors or windows is required as per the Electrical Safety Authority guidelines and Alectra Standards. Electrical room shall be located on grade. - In order to have consistent demarcation point, we will supply and install at owner?s expense the underground secondary cables from pad-mounted transformers(s) to the main electrical room(s) located on grade inside the building adjacent to an outside wall or customer to provide transition unit into the hydro vault. - An Alectra Application Form for hydro supply will be required. We recommend establishing this at a very early stage to allow for proper procedures. Lead time for delivery for major equipment (i.e. transformer) is approximately 32 weeks form the date that the application and required deposit is received. To be continued..... **Created :** 2018-12-10 02:48:45 **Last Modified :** 2018-12-12 04:06:58
2	NOTE:	7Dec2018 - We recommend awareness and caution if working in the area where underground or overhead electrical cables exist. Before any excavation, please obtain hydro locates by calling Ontario One at 1-800-400-2255. - Any extraordinary issues that arise after rezoning approval, which may have not been a concern during the review stage, will supersede any of our rezoning comments Should you have any concerns, please do not hesitate to contact our Mr. Goran Mandic at 905-283-4144. **Created :** 2018-12-10 02:50:53 **Last Modified :** 2018-12-12 04:06:58

HYDRO ONE NETWORK

HYDRO ONE NETWORK Contact: Tel.

No	Milestone	Condition

HYDRO ONE NETWORK

HYDRO ONE NETWORK Contact: Tel.

No	Milestone	Condition
1	NOTE:	We are in receipt of your Plan of Subdivision application, T-M18005 W5 dated October 17,2018. We have reviewed the documents concerning the noted Plan and have no comments or concerns at this time. Our preliminary review considers issues affecting Hydro Ones 'High Voltage Facilities and Corridor Lands' only. For proposals affecting 'Low Voltage Distribution Facilities' the Owner/Applicant should consult their local area Distribution Supplier. Where Hydro One is the local supplier the Owner/Applicant must contact the Hydro subdivision group at subdivision@Hydroone.com or 1-866-272-3330. To confirm if Hydro One is your local distributor please follow the following link: http://www.hydroone.com/StormCenter3/ If you have any further questions or inquiries, please contact Customer Service at 1-888-664-9376 or e-mail CustomerCommunications@HydroOne.com to be connected to your Local Operations Centre CONTACT: Dennis De Rango Specialized Services Team Lead, Real Estate Department Hydro One Networks Inc. Tel: 905-946-6237 Email: Dennis.DeRango@HydroOne.com **Created :** 2018-11-19 10:21:23 **Last Modified :** 2018-12-12 05:02:53

PEEL DIST SCHOOL BOARD

PEEL DIST SCHOOL BOARD Contact: Branko Vidovic Tel. (905) 890-1010 x2724

No	Milestone	Condition
1	NOTE:	The Peel District School Board has reviewed the above noted application based on its School Accommodation Criteria and has the following comments: The anticipated yield is as follows: K-5 = 280; 6-8 = 87; 9-12 = 151. The students generated are presently within the following attendance areas: Nahani Way P.S.(Enrolment = 498; Capacity = 614 ;# of Portables = 0); Bristol Road Middle P.S. (Enrolment = 632; Capacity = 601; # of Portables = 3) Applewood Heights S.S.(Enrolment = 1,193; Capacity = 1,284; # of Portables = 0). An addition, portables, boundary change and/or school re-organization may be required at the affected school(s) to accommodate the anticipated number of students from this development. **Created :** 2018-11-02 02:49:21 **Last Modified :** 2019-03-07 12:30:50

File: 21T-M 18 5
Proposal: 6 residential apartment buildings (up to 45 storeys) with grade related podiums, a public park and and amenity building

PEEL DIST SCHOOL BOARD

PEEL DIST SCHOOL BOARD Contact: Branko Vidovic Tel. (905) 890-1010 x2724

No	Milestone	Condition
2	SERV AND/OR DEV. AGT	City of Mississauga Council Resolution 152-98 applies to this application, therefore prior to final approval, the City of Mississauga shall be advised by the School Board(s) that satisfactory arrangements regarding the provision and distribution of educational facilities have been made between the developer/applicant and the School Board(s) for this plan. **Created :** 2018-11-02 02:49:21 **Last Modified :**
3	SERV AND/OR DEV. AGT	The Peel District School Board requires the following clauses be placed in any agreement of purchase and sale entered into with respect to any units on this plan, within a period of five years from the date of registration of the development agreement: (a) "Whereas, despite the efforts of the Peel District School Board, sufficient accommodation may not be available for all anticipated students in the neighbourhood schools, you are hereby notified that some students may be accommodated in temporary facilities or bused to schools outside of the area, according to the Board's Transportation Policy. You are advised to contact the School Accommodation department of the Peel District School Board to determine the exact schools." (b) "The purchaser agrees that for the purposes of transportation to school the residents of the development shall agree that the children will meet the school bus on roads presently in existence or at another designated place convenient to the Board." **Created :** 2018-11-02 02:49:21 **Last Modified :**
4	SERV AND/OR DEV. AGT	The developer shall agree to erect and maintain signs at the entrances to this development which shall advise prospective purchases that due to present school facilities, some of the children from this development may have to be accommodated in temporary facilities or bused to schools, according to the Board's Transportation Policy. **Created :** 2018-11-02 02:49:22 **Last Modified :**

REGION OF PEEL

REGION OF PEEL Contact: Angelo Ambrico Tel. (905) 791-7800 x4612

No	Milestone	Condition
1	NOTE:	Municipal sanitary sewer facilities consist of a 540mm diameter sewer on Eglinton Avenue East. Existing infrastructure also consists of 300mm diameter watermains on Preston Meadow Ave, Nahani Way and Forum Drive. There is also a constructed, but not currently in use, 300mm diameter watermain on Eglinton Avenue East from Forum Drive to the proposed site. **Created :** 2018-12-20 03:50:41 **Last Modified :**

REGION OF PEEL

REGION OF PEEL Contact: Angelo Ambrico Tel. (905) 791-7800 x4612

No	Milestone	Condition
2	RECOMMENDATION REPORT	The Region has received the Functional Servicing Report (FSR) prepared by C.F. Crozier & Associates Inc., dated September 2018. Please be advised that the FSR must be approved by the Region and must show proposed prior to the Engineering Submission. This subdivision cannot proceed with development until an external 525/600mm diameter sanitary sewer on Tailfeather Crescent to service this site has been twinned/ upsized and preliminary approved to the Region's satisfaction. **Created :** 2018-12-20 03:50:39 **Last Modified :** 2019-02-06 04:48:52
3	NOTE:	The Region will require a Condominium Water Servicing Agreement and a draft Declaration and Description with completed Schedule A for the future Common Element Condominium (Block 1 and 2) **Created :** 2018-12-20 03:50:41 **Last Modified :**
4	NOTE:	The Developer acknowledges that the lands are subject to the Region's Development Charges By-law. The applicable development charges shall be paid in the manner and at times provided by this By-law. **Created :** 2018-12-20 03:50:42 **Last Modified :**
5	RECOMMENDATION REPORT	Servicing of this plan will require the construction of oversized 373/525/625mm diameter sanitary sewers which are the financial responsibility of the Region as per the Development Charges By-law. Should the Developer wish to proceed with these works in order to obtain clearance of the Draft Plan conditions at a time when the Region is not prepared to fund the works, then the Developer shall be required to enter into a Front-Ending Agreement prior to the construction of the works. This Agreement will be subject to the Region's determination that is has or will have sufficient funds to justify entering into the Front-Ending Agreement and Regional Council approval. The following required oversized sanitary sewers shall be included in the Five Year Capital Budget and Forecast: 1) 375mm diameter sanitary sewer on future Thornwood Drive from Eglinton Avenue East to future Armdale Road, Construction Year: 2020; Project Number: TBD; and; 2) Twinning existing 525/600mm diameter sanitary sewers on Tailfeather Crescent, Construction Year: 2020; Project Number: TBD **Created :** 2018-12-20 03:50:42 **Last Modified :** 2019-02-06 04:48:52
6	SERV AND/OR DEV. AGT	Clauses shall be included in the Subdivision Agreement stating that: a) Water meter fees for future residential and commercial blocks shall be payable to the Region prior to the issuance of building permits, in accordance with the Region's Fees By-law, as amended from time to time. **Created :** 2018-12-20 03:50:42 **Last Modified :**

File: 21T-M 18 5
Proposal: 6 residential apartment buildings (up to 45 storeys) with grade related podiums, a public park and and amenity building

REGION OF PEEL

REGION OF PEEL Contact: Angelo Ambrico Tel. (905) 791-7800 x4612

No	Milestone	Condition
7	SERV AND/OR DEV. AGT	Clauses shall be included in the Subdivision Agreement stating that: a) the Developer shall gratuitously transfer to the Region, free and clear of all encumbrances, and to the satisfaction of the Region all necessary easements for the proposed and existing Regional infrastructure as required by the Region to service the proposed plan and external lands; and b) All costs associated with easements shall be 100% the responsibility of the Developer. **Created :** 2018-12-20 03:50:42 **Last Modified :**
8	SERV AND/OR DEV. AGT	Clauses shall be included in the Subdivision Agreement stating that: a) Servicing of the subdivision will require the construction of oversized 375/525/600mm diameter sanitary sewers which are the financial responsibility of the Region as per Development Charges By-Law. The 375/525/600mm diameter sanitary sewer shall be included in the Five Year Capital Budget and Forecast; and b) The Developer shall make appropriate financial arrangements with the Region prior to the construction of such Works. The construction will be subject to the Region's determination that it has or will have sufficient funds to finance the Works. **Created :** 2018-12-20 03:50:43 **Last Modified :**
9	SERV AND/OR DEV. AGT	Clauses shall be included in the Subdivision Agreement stating that: a) Restriction on transfer or charge for all lots and blocks within the plan of subdivision, save and except those to be conveyed to the City and the Region, shall be registered on title to said lots and blocks prohibiting any transfers or charge of said lots and blocks without consent of the Region until external 525/600mm diameter sanitary sewers to service this Plan have been constructed and preliminary approved to the Region's satisfaction; and b) The Developer shall be responsible for all costs in respect of said restriction on title. **Created :** 2018-12-20 03:50:42 **Last Modified :**
10	SERV AND/OR DEV. AGT	Clauses shall be included in the Subdivision Agreement stating that: a) Within (60) days of preliminary acceptance of the underground services, the Developer's engineer shall submit "As-Constructed" drawings in digital format, pursuant to the latest Region's Digital Format Guidelines; b) The Developer's engineer shall also provide all ties to all main line valves, ties to individual water service boxes, linear ties to sanitary sewer services and GPS coordinates of all watermain and sanitary sewer appurtenances in accordance with the latest requirements of the Region's "Development Procedures Manual". **Created :** 2018-12-20 03:50:43 **Last Modified :**
11	REGISTRATION	Prior to Registration of the Plan of Subdivision, the Developer shall execute a Subdivision Agreement with the local municipality and the Region for the construction of municipal sanitary sewer and water associated with the lands. The Developer shall construct and design these services in accordance with the latest Region standards and requirements. **Created :** 2018-12-20 03:50:41 **Last Modified :**

REGION OF PEEL

REGION OF PEEL Contact: Angelo Ambrico Tel. (905) 791-7800 x4612

No	Milestone	Condition
12	RECOMMENDATION REPORT	Prior to Site Servicing, the Developer shall submit a satisfactory Engineering Submission to the Region for review and approval. **Created :** 2018-12-20 03:50:41 **Last Modified :** 2019-02-06 04:48:52
13	REGISTRATION	Prior to Registration of the Plan of Subdivision, the Developer shall pay the Region's cost for updating its electronic "As Constructed" information for the infrastructure installed by the Developer. The cost shall be based on a "per kilometer" basis for combined watermains and sanitary sewers installed pursuant to the Region's latest User Fees By-law. **Created :** 2018-12-20 03:50:41 **Last Modified :**
14	RECOMMENDATION REPORT	Prior to Site Servicing, the Region may require the Developer to construct a sampling hydrant (at the developers cost) within the proposed plan. Location and the requirement for sampling hydrant will be determined at the engineering review stage. **Created :** 2018-12-20 03:50:41 **Last Modified :** 2019-02-06 04:48:52
15	SERV AND/OR DEV. AGT	Clauses shall be included in the Subdivision Agreement stating that: The Developer agrees that the Region shall hold back a portion of the Letter of Credit to cover the costs of services completed by the Region on a time and material basis pursuant to the current Region¿s User Fee By-Law. **Created :** 2018-12-20 03:50:42 **Last Modified :**
16	SERV AND/OR DEV. AGT	Clauses shall be included in the Subdivision Agreement stating that: a) The Developer will maintain adequate chlorine residuals in the watermains within the plan from the time the watermains are connected to the municipal system until such time as the Region issues Final Acceptance. To maintain adequate chlorine residuals, the Developer shall either install automatic flushing devices or retain Regional staff to carry out manual flushing. Regional staff shall conduct the monitoring and testing for chlorine residuals; and b) All costs associated with the monitoring and flushing shall be the responsibility of the Developer pursuant to the current Region?s User Fee By-Law. **Created :** 2018-12-20 03:50:42 **Last Modified :**
17	SERV AND/OR DEV. AGT	Clauses shall be included in the Subdivision Agreement stating that: The Developer shall agree that neither the Developer nor any Builder will apply for building permits for any lots or blocks within the plan of subdivision until the Region's Public Works Department has issued Preliminary Acceptance and provided notice to the local municipality stating that internal and external sanitary sewers and watermains, including fire protection, have been completed to the Region's satisfaction. The Developer's Consulting Engineer shall certify in writing that the internal and external sanitary sewers and watermains, including fire protection, have been constructed, inspected and shall function in accordance with the detailed design as approved by the Region. **Created :** 2018-12-20 03:50:42 **Last Modified :**

File: 21T-M 18 5
Proposal: 6 residential apartment buildings (up to 45 storeys) with grade related podiums, a public park and and amenity building

REGION OF PEEL

REGION OF PEEL Contact: Angelo Ambrico Tel. (905) 791-7800 x4612

No	Milestone	Condition
18	SERV AND/OR DEV. AGT	Clauses shall be included in the Subdivision Agreement stating that: The Developer shall indemnify and hold the Region harmless from and against any and all actions, suites, claims, demands, and damages which may arise either directly or indirectly by reason of the development of the subject lands and/or construction of works, save and except for any actions, causes of action, claims, demands and damages arising out of the negligence of the Region or those for whom it is in law responsible. **Created :** 2018-12-20 03:50:41 **Last Modified :**
19	REGISTRATION	Prior to Registration of the Plan of Subdivision, the Developer shall submit draft reference plan(s) for the Region's review and approval prior to such plans being deposited. All costs associated with preparation and depositing of the plans and transfer of lands shall be at the sole expense of the Developer. **Created :** 2018-12-20 03:50:41 **Last Modified :**
20	SERV AND/OR DEV. AGT	Clauses shall be included in the Subdivision Agreement stating that: a) The Developer agrees that prior to the Region granting clearance of the draft plan conditions of subdivision approval, the following shall required to be forwarded the Region's Legal Services Division: i) A copy of the final signed M-Plan; ii) A copy of the final draft R-Plan(s); and iii) The documents required pursuant to Schedule B of the Subdivision Agreement and all associated documents. **Created :** 2018-12-20 03:50:43 **Last Modified :**

File: 21T-M 18 5

Proposal: 6 residential apartment buildings (up to 45 storeys) with grade related podiums, a public park and and amenity building

REGION OF PEEL

REGION OF PEEL Contact: Angelo Ambrico Tel. (905) 791-7800 x4612

No	Milestone	Condition
21	DRAFT APPR	Waste Requirements: 1) The waste collection vehicle access route throughout the complex indicating turning radii and turning movements is to be clearly labelled on the drawing. 2) The turning radius from the centre line must be a minimum of 13 metres on all turns. This includes the turning radii to the entrance and exit of the site. For the residential towers, the Region of Peel will provide front-end collection of garbage, recyclable materials, household organics and yard waste subject to the conditions set out in the Waste Collection Design Standards Manual, specifically Section 2 and 4 for internal waste storage and collection area requirements. For the residential townhouse units, the Region of Peel will provide curbside collection of garbage, recyclable materials, household organics, and yard waste subject to the following conditions: 1) Each dwelling unit must have its own identifiable collection point. See Appendix 9 of the Waste Collection Design Standards Manual for an example of a collection point. See Section 3.0 of the Waste Collection Design Standards Manual for curbside collection requirements. and; 2) Road layouts shall be designed to permit a waste collection vehicle to drive forward without reversing for waste collection. Where the requirements for a road layout permitting forward movement of a waste collection vehicle cannot be met, a cul-de-sac or a T-turnaround shall be provided in accordance with the specifications shown in Appendices 2 and 3, respectively (Waste Collection Design Standards Manual). A turnaround is required at the driveway alongside building H3. For more information, please consult the Waste Collection Design Standards Manual available at: https://www.peelregion.ca/pw/standards/design/waste-collection-design-manual-2016.pdf **Created :** 2019-03-13 03:41:14 **Last Modified :**

APPENDIX G

COMPLETED QUESTIONNAIRES BY NEIGHBOURING BUSINESSES

Jade Acoustics Inc. | Consulting Engineers | 411 Confederation Parkway, Unit 19, Concord, Ontario, L4K 0A8 | Tel: (905) 660-2444 | Fax: (905) 660-4110

May 15, 2019

Shoppers Drug Mart
5033 Hurontario Street
Mississauga, Ontario
L4Z 3X7

To Whom It May Concern:

JADE ACOUSTICS

Re: Information Request
Proposed Residential Development
91 Eglinton Avenue East
City of Mississauga
Our File: 18-090

As requested by the owner of the property located at 91 Eglinton Avenue East and as required by the City of Mississauga, we are conducting a noise study for the above mentioned development, which is proposed for residential re-development. As part of the noise study, we are required by the Ministry of the Environment, Conservation and Parks to identify and quantify all potential noise sources. In order to do this adequately we have summarized the information we require regarding your operations. Please complete and return this form by fax or email by May 22, 2019. We will then contact you regarding a time and date to complete sound measurements (if required).

1. What is the primary function of your company? Retail Pharmacy

2. What are your hours of operation? 8 AM - Midnight M-S
How many days per week? 9 AM - " Sunday

3. Is your operation seasonal? If so, describe the operations associated with different seasons. NO

4. Are you currently operating at full capacity? If so, will you be operating at this level for the next several weeks? YES

5. If not, when do you anticipate being at full operating capacity? N/A

6. What noise producing equipment do you have located:

(a) internally? Fridges

(b) internally but exhausting/intaking to the exterior? NO EXTERNAL

(c) externally? NONE

7. Does your company have any outside storage? If so, are there any activities such as forklifts or transport trucks which access the storage area? NONE PERMANENT
TWO SHIPPING CONTAINER - HAND TRUCK ACCESS ONLY

8. How many trucks use the shipping/receiving area during the day and at night? How are deliveries offloaded (e.g. forklift)?
MAX 6 ON THURSDAY
TYPICAL 1-2 ROW
} 6pm cut off
+power pump truck

9. Where is the shipping/receiving area for your business located?
Rear

10 Are shipping doors left open during the summer? Where are they located?
No

11. Are there any planned modifications/expansions to your facility?
NO

12. Does your company have a valid Certificate of Approval (C of A) or Environmental Compliance Approval (ECA) from the Ministry of the Environment, Conservation and Parks which includes a noise assessment and noise mitigation measures, if required? If yes, please provide us with a copy of the Approvals documentation and copy of the noise assessment report. NO

13. Other information NONE

JADE ACOUSTICS

14. Contact Information
Name: ~~Bani~~ Vani Jeyarajah
Position: Manager
Telephone No.: 905-890-~~1330~~ 1313
Fax No.:
E-mail: FSDM1100@shoppersdrugmart.ca

If you have any questions, please contact the undersigned. Thank you in advance for your assistance.

Yours truly,

JADE ACOUSTICS INC.

Per:

Michael Bechbache, E.I.T.
michael@jadeacoustics.com

MB/CK/jg
J:\Letters\2018\18-090 May 15-19 Shoppers Drugmart Information Request.doc

Jade Acoustics Inc. | Consulting Engineers | 411 Confederation Parkway, Unit 19, Concord, Ontario, L4K 0A8 | Tel: (905) 660-2444 | Fax: (905) 660-4110

May 15, 2019

Bombay Bhel Restaurant
5035 Hurontario Street
Mississauga, Ontario
L4Z 3X7

To Whom It May Concern:

JADE ACOUSTICS

Re: Information Request
Proposed Residential Development
91 Eglinton Avenue East
City of Mississauga
Our File: 18-090

As requested by the owner of the property located at 91 Eglinton Avenue East and as required by the City of Mississauga, we are conducting a noise study for the above mentioned development, which is proposed for residential re-development. As part of the noise study, we are required by the Ministry of the Environment, Conservation and Parks to identify and quantify all potential noise sources. In order to do this adequately we have summarized the information we require regarding your operations. Please complete and return this form by fax or email by May 22, 2019. We will then contact you regarding a time and date to complete sound measurements (if required).

1. What is the primary function of your company? Restaurant

2. What are your hours of operation? Tuesday - Friday 12-3 / 5-10pm
How many days per week? Sat & Sunday 1:00pm to 10pm

3. Is your operation seasonal? If so, describe the operations associated with different seasons. NO

4. Are you currently operating at full capacity? If so, will you be operating at this level for the next several weeks? YES

5. If not, when do you anticipate being at full operating capacity? _____

N/A

6. What noise producing equipment do you have located: _____

(a) internally? _____

(b) internally but exhausting/intaking to the exterior? _____

(c) externally? _____

NONE

7. Does your company have any outside storage? If so, are there any activities such as forklifts or transport trucks which access the storage area? _____

Grease container

8. How many trucks use the shipping/receiving area during the day and at night? How are deliveries offloaded (e.g. forklift)? _____

9. Where is the shipping/receiving area for your business located?

Rear Single man door

10 Are shipping doors left open during the summer? Where are they located?

NO

11. Are there any planned modifications/expansions to your facility? _____

NO

12. Does your company have a valid Certificate of Approval (C of A) or Environmental Compliance Approval (ECA) from the Ministry of the Environment, Conservation and Parks which includes a noise assessment and noise mitigation measures, if required? If yes, please provide us with a copy of the Approvals documentation and copy of the noise assessment report. _____

_____

_____

13. Other information _____

_____

_____

_____

_____

JADE ACOUSTICS

14. Contact Information

Name: _____

Position: _____

Telephone No.: _____

Fax No.: _____

E-mail: _____

If you have any questions, please contact the undersigned. Thank you in advance for your assistance.

Yours truly,

JADE ACOUSTICS INC.

Per: _____

Michael Bechbache, E.I.T.
michael@jadeacoustics.com

MB/CK/jg
J:\Letters\2018\18-090 May 15-19 Bombay Bhel Restaurant Information Request.doc

May 15, 2019

Bombay Bhel Restaurant
5035 Hurontario Street
Mississauga, Ontario
L4Z 3X7

To Whom It May Concern:

Re: Information Request
Proposed Residential Development
91 Eglinton Avenue East
City of Mississauga
Our File: 18-090

As requested by the owner of the property located at 91 Eglinton Avenue East and as required by the City of Mississauga, we are conducting a noise study for the above mentioned development, which is proposed for residential re-development. As part of the noise study, we are required by the Ministry of the Environment, Conservation and Parks to identify and quantify all potential noise sources. In order to do this adequately we have summarized the information we require regarding your operations. Please complete and return this form by fax or email by May 22, 2019. We will then contact you regarding a time and date to complete sound measurements (if required).

1. What is the primary function of your company? Restaurant

2. What are your hours of operation? Tuesday - Friday 12-3 5-10pm
   How many days per week? Sat. Sunday 1:00pm to 10pm

3. Is your operation seasonal? If so, describe the operations associated with different seasons. NO

4. Are you currently operating at full capacity? If so, will you be operating at this level for the next several weeks? YES

5. If not, when do you anticipate being at full operating capacity? N/A

6. What noise producing equipment do you have located:

(a) internally? NONE

(b) internally but exhausting/intaking to the exterior? HOOD FAN

(c) externally? NONE

7. Does your company have any outside storage? If so, are there any activities such forklifts or transport trucks which access the storage area? Grease container

8. How many trucks use the shipping/receiving area during the day and at night? How deliveries offloaded (e.g. forklift)? 1 per day dairy/produce/poultry
midday deliveries

9. Where is the shipping/receiving area for your business located? Rear Single man door

10 Are shipping doors left open during the summer? Where are they located? NO

11. Are there any planned modifications/expansions to your facility? NO

Drug Mart

Puneet Si

Does your company have a valid Certificate of Approval (C of A) or Environmental Compliance Approval (ECA) from the Ministry of the Environment, Conservation and Parks which includes a noise assessment and noise mitigation measures, if required? If yes, please provide us with a copy of the Approvals documentation and copy of the noise assessment report. N/A

Other information N/A

Contact Information

Name: MANDEEP NAGPAL

Position: OPERATOR

Telephone No.: 905-890-7955

Fax No.:

E-mail: Bombaybhel@rogers.com

ou have any questions, please contact the undersigned. Thank you in advance for your istance.

rs truly,

DE ACOUSTICS INC.

Michael Bechbache, E.I.T.
michael@jadeacoustics.com

K/jg
ers\2018\18-090 May 15-19 Bombay Bhel Restaurant Information Request.doc

Jade Acoustics Inc. | Consulting Engineers | 411 Confederation Parkway, Unit 19, Concord, Ontario, L4K 0A8 | Tel: (905) 660-2444 | Fax: (905) 660-4110

May 15, 2019

COBS Bread Bakery
5035 Hurontario Street
Mississauga, Ontario
L4Z 3X7

To Whom It May Concern:

JADE ACOUSTICS

Re: Information Request
Proposed Residential Development
91 Eglinton Avenue East
City of Mississauga
Our File: 18-090

As requested by the owner of the property located at 91 Eglinton Avenue East and as required by the City of Mississauga, we are conducting a noise study for the above mentioned development, which is proposed for residential re-development. As part of the noise study, we are required by the Ministry of the Environment, Conservation and Parks to identify and quantify all potential noise sources. In order to do this adequately we have summarized the information we require regarding your operations. Please complete and return this form by fax or email by May 22, 2019. We will then contact you regarding a time and date to complete sound measurements (if required).

1. What is the primary function of your company? Bakery / Retail

2. What are your hours of operation? M-S 6:00AM — 8:00PM
How many days per week? Sun " — 6:00pm

3. Is your operation seasonal? If so, describe the operations associated with different seasons. NO

4. Are you currently operating at full capacity? If so, will you be operating at this level for the next several weeks? YES

5. If not, when do you anticipate being at full operating capacity? _____

N/A

6. What noise producing equipment do you have located: _____

(a) internally? ~~MIXED~~ MIXER

(b) internally but exhausting/intaking to the exterior? _____

NONE.
OUTDOOR ONLY.

(c) externally? NONE

7. Does your company have any outside storage? If so, are there any activities such as forklifts or transport trucks which access the storage area? _____

NONE

8. How many trucks use the shipping/receiving area during the day and at night? How are deliveries offloaded (e.g. forklift)? _____

2 / WEEK (SUNDAY & TUESDAY)
BY HAND 8PM TO 6:00 AM

9. Where is the shipping/receiving area for your business located?

REAR

10 Are shipping doors left open during the summer? Where are they located?

NO

11. Are there any planned modifications/expansions to your facility? _____

NO.

12. Does your company have a valid Certificate of Approval (C of A) or Environmental Compliance Approval (ECA) from the Ministry of the Environment, Conservation and Parks which includes a noise assessment and noise mitigation measures, if required? If yes, please provide us with a copy of the Approvals documentation and copy of the noise assessment report. N/A

13. Other information None

JADE ACOUSTICS

14. Contact Information
Name: AMA - See card.
Position:
Telephone No.:
Fax No.:
E-mail:

If you have any questions, please contact the undersigned. Thank you in advance for your assistance.

Yours truly,

JADE ACOUSTICS INC.

Per:

Michael Bechbache, E.I.T.
michael@jadeacoustics.com

MB/CK/jg
J:\Letters\2018\18-090 May 15-19 COBS Bread Bakery Information Request.doc

Jade Acoustics Inc. | Consulting Engineers | 411 Confederation Parkway, Unit 19, Concord, Ontario, L4K 0A8 | Tel: (905) 660-2444 | Fax: (905) 660-4110

May 15, 2019

LCBO Store 505
5035 Hurontario Street
Mississauga, Ontario
L4Z 3X7

To Whom It May Concern:

Re: Information Request
Proposed Residential Development
91 Eglinton Avenue East
City of Mississauga
Our File: 18-090

JADE ACOUSTICS

As requested by the owner of the property located at 91 Eglinton Avenue East and as required by the City of Mississauga, we are conducting a noise study for the above mentioned development, which is proposed for residential re-development. As part of the noise study, we are required by the Ministry of the Environment, Conservation and Parks to identify and quantify all potential noise sources. In order to do this adequately we have summarized the information we require regarding your operations. Please complete and return this form by fax or email by May 22, 2019. We will then contact you regarding a time and date to complete sound measurements (if required).

1. What is the primary function of your company? Retail

2. What are your hours of operation? M-R 10-10
Fri 9 ~~10~~ 11pm
How many days per week? Sun 10-8

3. Is your operation seasonal? If so, describe the operations associated with different seasons. NO.

4. Are you currently operating at full capacity? If so, will you be operating at this level for the next several weeks? YES.

5. If not, when do you anticipate being at full operating capacity? N/A

6. What noise producing equipment do you have located:

(a) internally? SMALL COOLERS

(b) internally but exhausting/intaking to the exterior? NONE.

(c) externally? NONE.

JADE ACOUSTICS

7. Does your company have any outside storage? If so, are there any activities such as forklifts or transport trucks which access the storage area? NONE.

8. How many trucks use the shipping/receiving area during the day and at night? How are deliveries offloaded (e.g. forklift)? 5-6 / week BEFORE 6:00pm
By hand or pump cart.

9. Where is the shipping/receiving area for your business located? REAR.

10 Are shipping doors left open during the summer? Where are they located? NO.

11. Are there any planned modifications/expansions to your facility? NO

12. Does your company have a valid Certificate of Approval (C of A) or Environmental Compliance Approval (ECA) from the Ministry of the Environment, Conservation and Parks which includes a noise assessment and noise mitigation measures, if required? If yes, please provide us with a copy of the Approvals documentation and copy of the noise assessment report. N/A

13. Other information NONE

JADE ACOUSTICS

14. Contact Information
Name: Puneet Sidhu / Alex
Position: Manager / Assistant Manager
Telephone No.: 905-501-9784
Fax No.:
E-mail: puneet.sidhu@lcbo.com

If you have any questions, please contact the undersigned. Thank you in advance for your assistance.

Yours truly,

JADE ACOUSTICS INC.

Per:

Michael Bechbache, E.I.T.
michael@jadeacoustics.com

MB/CK/jg
J:\Letters\2018\18-090 May 15-19 LCBO 5035 Hurontario Street Information Request.doc

Jade Acoustics Inc. | Consulting Engineers | 411 Confederation Parkway, Unit 19, Concord, Ontario, L4K 0A8 | Tel: (905) 660-2444 | Fax: (905) 660-4110

May 15, 2019

Sleep Country Canada
5035 Hurontario Street
Mississauga, Ontario
L4Z 3X7

To Whom It May Concern:

JADE ACOUSTICS

Re: Information Request
Proposed Residential Development
91 Eglinton Avenue East
City of Mississauga
Our File: 18-090

As requested by the owner of the property located at 91 Eglinton Avenue East and as required by the City of Mississauga, we are conducting a noise study for the above mentioned development, which is proposed for residential re-development. As part of the noise study, we are required by the Ministry of the Environment, Conservation and Parks to identify and quantify all potential noise sources. In order to do this adequately we have summarized the information we require regarding your operations. Please complete and return this form by fax or email by May 22, 2019. We will then contact you regarding a time and date to complete sound measurements (if required).

1. What is the primary function of your company? Retail -

2. What are your hours of operation? M-F 10:00AM to 9:00pm.
How many days per week? Sat 9:30 " " 6:00pm.
Sun 11:00 " " 5:00pm.

3. Is your operation seasonal? If so, describe the operations associated with different seasons. NO.

4. Are you currently operating at full capacity? If so, will you be operating at this level for the next several weeks? YES.

5. If not, when do you anticipate being at full operating capacity? N/A

6. What noise producing equipment do you have located:

(a) internally? NONE

(b) internally but exhausting/intaking to the exterior? NONE

(c) externally? NONE

JADE ACOUSTICS

7. Does your company have any outside storage? If so, are there any activities such as forklifts or transport trucks which access the storage area? NO

8. How many trucks use the shipping/receiving area during the day and at night? How are deliveries offloaded (e.g. forklift)? 1 week on THURSDAY HAND OFF LOADING

9. Where is the shipping/receiving area for your business located? REAR

10 Are shipping doors left open during the summer? Where are they located? No

11. Are there any planned modifications/expansions to your facility? NO

Jade Acoustics Inc. | Consulting Engineers | 411 Confederation Parkway, Unit 19, Concord, Ontario, L4K 0A8 | Tel: (905) 660-2444 | Fax: (905) 660-4110

12. Does your company have a valid Certificate of Approval (C of A) or Environmental Compliance Approval (ECA) from the Ministry of the Environment, Conservation and Parks which includes a noise assessment and noise mitigation measures, if required? If yes, please provide us with a copy of the Approvals documentation and copy of the noise assessment report. No

13. Other information NONE

14. Contact Information

Name: Michael Sharma
Position: Regional Sales Manager
Telephone No.: 416-318-5037
Fax No.:
E-mail: Michael.sharma@sleepcountry.ca

If you have any questions, please contact the undersigned. Thank you in advance for your assistance.

Yours truly,

JADE ACOUSTICS INC.

Per:

Michael Bechbache, E.I.T.
michael@jadeacoustics.com

MB/CK/jg
J:\Letters\2018\18-090 May 15-19 Sleep Country Canada Information Request.doc