December 4, 2023 rev. 1

Ayza Anwar, Development Associate
ADI Developments (Masonry) Inc
1100 Burloak Dr | PH Suite 700
Burlington ON | L7L 6B2

Attention: Ayza Anwar

Re: GTR-00074068-A1
L7T 2J1

Project Name: D-6 Land Use Compatibility – Air Quality – 1120 Cooke Blvd., Burlington, ON

Subject: Response to Halton Region Peer Review Prepared by Dillon Consulting

Dear: Ms. Anwar:

EXP Services Inc. (EXP) was retained by ADI Developments (Masonry) Inc, to complete a D-6 Compatibility – Air Quality Assessment at 1120 Cooke Blvd., Burlington, ON, to fulfill the requirements of the Official Plan Amendment and Zoning By-law Amendment for the City of Burlington for an air quality study. A report, dated November 17, 2021, was provided and underwent Peer Review. EXP's response to the City of Burlington Community Planning Department Staff (Planning Staff) letter dated December 8, 2022, Metrolinx, and CN, was provided on February 16, 2023. EXP provided an updated report dated June 20, 2023 in response to additional comments received from Halton Region Planning and Building Department, dated May 12, 2023.

Dillon Consulting provided a Peer Review of the June 20, 2023 report on November 8, 2023. The relevant comments and EXP's responses are summarized below.

Comments Land Use Compatibility Dillon Consulting November 8, 2023

1. In general, the Report does not fully align with the requirements of the relevant guidelines for land use compatibility. The Report provides a screening of the area surrounding the Proposed Development but does not include a technical assessment demonstrating compatibility with the surrounding land uses.

Response: The assessment conducted fully aligns with the requirements of the relevant guidelines for land use compatibility. A detailed technical assessment demonstrating compatibility with the surrounding land use, i.e. CBM Ready Mix and KMP Industries, was conducted with the findings indicating that concentrations at sensitive receptors, including at elevated heights were within the O. Reg. 419/05 criteria protective of public and environmental health. Additional clarification can be included in an updated report that can be provided during the Site Plan Application.

2. The Report identifies vacant lands within the study area. It is unclear if any of the vacant lands are zoned to allow industrial use. If any such lands exist, they should be included in the compatibility assessment, including technical considerations as required, per the D-Series Guidelines and Halton Region's Land Use Compatibility Guidelines.

Response: The vacant land was assessed as a potential worst-case Class II facility and notes impact to sensitive receptors could be managed by the MECP approval process. The report can be further updated and provided during the Site Plan Application to also note the Planning for Burlington's Major Transit Station Areas (MTSAs) to accommodate a proportional mix of residential and employment.

3. The Report has identified automotive refinishing facilities as Class I based on the requirements of the MECP'S EASR system. Some of the autobody shops have been listed as regulated under the ECA system, not the EASR system. The Report should confirm on a per-facility basis if the relevant autobody facilities are complying with the requirements of the EASR system. Otherwise, the assessment should be updated to reflect Class II operations.

Response: In our opinion, the automotive refinishing facilities should qualify as a Class I operation based on MECP's EASR system and that the MECP approvals process can be relied on. Regardless, it is noted that the identified/existing automotive refinishing industries meet the minimum separation distances for Class II facilities. The report can be updated to include this clarification which can be provided during the Site Plan Application.

4 . Section 5.1.2 of the Report appears to conflate fugitive dust with particulate matter emissions. Per the MECP's Guideline A-10 – Procedure for Preparing an Emission Summary and Dispersion Modelling Report many facilities are not required to assess fugitive dust emissions in order to obtain their environmental permissions. For this reason, the D-Series of Guidelines requires the assessment of fugitive dust within a land use compatibility context. The Report should be updated to include consideration of the potential for fugitive dust impacts.

Response: The MECP's Guideline A-10 requires all emissions to be assessed including fugitive dust (section 7.4), particulates and other contaminants under O. Reg. 419/05. Since all emissions fugitive and or specific sources such as stacks or dust collectors must be assessed and controlled no update to the report is required in this regard. However, additional verbiage to clarify this can be provided in an updated report during the Site Plan Application.

5. Section 6 of the Report does not contain sufficient technical details to demonstrate compatibility with the surrounding uses. While the Report has included qualitative observations which may help make a determination around compatibility, the necessary quantitative details have not been included, such as emissions quantification and air dispersion modelling. A number of Class II and Class III industries have been identified for which detailed technical assessments should be provided per the D-Series Guidelines and Halton Region's Land Use Compatibility Guidelines.

Response: Detailed technical assessment, including but not limited to comprehensive air dispersion modelling using an approved MECP dispersion model, demonstrating compatibility with the surrounding land use, i.e. CBM Ready Mix and KMP Industries, was conducted with the findings indicating that concentrations at sensitive receptors, including at elevated heights were within the O. Reg. 419/05 criteria protective of public and environmental health. This was noted in our earlier response (June 6, 2023) and revised report section 6.1 1093 Howard Road of the June report (section 6.1 1093 Howard) which states "EXP has reviewed the Emissions Summary Dispersion Modelling (ESDM) Report submitted for the approved ECA-air CMB Ready Mix located at 1093 Howard Road to assess potential impact at elevated receptors on the proposed developments. ***Based on assessment with additional receptors placed at each floor height and amenity areas*** *the existing ECA is adequate to protect impacts at elevated receptors at the proposed development." Impact from other facilities were also assessed based on observations of stack and building conditions with worst-case impacts expected to occur at ground level within their property boundaries. The additional details and clarifications noting that the assessment was based on dispersion modelling using MECP approved models (AERMOD) can be included in an updated report that can be provided during the Site Plan Application.*

6. Section 6 of the Report states that impacts from neighbouring industries on the Proposed Development "cannot be quantified at this time". It is unclear why impacts cannot be quantified, as is typically done in a land use compatibility assessment. As potential impacts have not been quantified at this time, the Report has not demonstrated that compatibility between the Proposed Development and the surrounding industries can be achieved.

Response: Potential impacts from neighbouring facilities were assessed and determined to be compatible. Verbiage in the report can be included to correct the impression that this was not demonstrated. As noted above the impacts were quantified using detailed modelling or assessment based on worst-case conditions using conservative assumptions. This can be provided in the updated report during the Site Plan Application.

7. Section 6 of the Report relies on the presence of existing sensitive receptors within the study area as justification for the Proposed Development being compatible. The existing sensitive receptors are not suitable analogues, as they appear to be lower in height than the Proposed Development, further from many of the identified industries than the Proposed Development, or in a different wind direction from existing industries when compared to the Proposed Development. Using the presence of existing receptors without an accompanying air dispersion modelling assessment comparing predicted concentrations at actual receptor locations is typically insufficient to demonstrate compatibility.

Response: As noted above air dispersion modelling assessment was conducted that determined no impact at elevated heights. Further Phase one adjacent to the proposed development includes a 6-storey sensitive receptor building that has been occupied for over one year. The report can be updated to clarify that dispersion modelling was conducted and include reference to existing building (sensitive receptor). The updated report can be provided during the Site Plan Application.

9. Section 6 of the Report refers to an assessment with receptors at varying floor heights. It is unclear what assessment this is referring to. The Report should be updated to provide further details of any technical assessment which was performed.

Response: The detailed assessment was conducted every 3 m from the ground floor to the top of the buildings, or as referenced in the report "Based on assessment with additional receptors placed at each floor height and amenity areas." The report can be updated to provide more clarification. The updated report can be provided during the Site Plan Application.

10. Section 6.3 of the report states that there is a potential for odours at the Proposed Development. Mitigation options have been recommended to minimize the impact of these odours. Typically, when recommending mitigation, it is important to understand the predicted concentration of odours at the proposed receptor. In some cases, such as very high odour concentrations, at-receptor mitigation may not be sufficient to demonstrate compatibility. Additionally, the Report should address how odours will be managed at outdoor locations such as balconies which would represent odour-sensitive receptors.

Response: The potential for odours at the receptors is low and at receptor mitigation is considered sufficient. Further no issues have been identified in Phase I, which has been occupied for a year. Compatibility can be achieved at the proposed development with mechanical ventilation with air particle filtration and/or optimizing the location of ventilation air intakes away from King Paving operations.
Based on the assessment the current building design, balcony layout, and common area amenities will not require change during the site plan stage. Other good building practices (mitigation measures) such as air conditioning, HVAC filtration, and mechanical design can also be implemented as needed without impacting the implementation of the proposes amendment to the Official Plan or Zoning By-law. The report can be updated to include this clarification and provided during the Site Plan Application.

11. Section 8 of the Report states that "the majority of the facilities identified within the Study Area are not expected to pose an unacceptable air quality, dust or odour issue to the Subject Site." As compatibility cannot be determined based on the majority of surrounding uses, the Report should be updated to consider every industrial use in the Study Area with a full technical assessment where required. Any industry within the Potential Area of Influence per the D-Series Guidelines and Halton Region's Land Use Compatibility Guidelines should be studied in further detail to determine if compatibility can be achieved with the Proposed Development.

Response: As noted above detailed studies were conducted. The report will be updated to remove the verbiage "the majority" to remove this confusion. The updated report can be provided during the Site Plan Application.

12. The Report has not assessed the potential for the Proposed Development to impact the ability of the surrounding industries to operate in accordance with their environmental permissions (i.e. EASR and ECA requirements). The introduction of new elevated receptors within the study area may present compliance issues for existing industries, which should be quantified.

Response: A review of the MECP Environmental Registry did not identify any new applications for industries in the study area. Further existing industry have not voiced opposition during the approval process and the proposed development is consistent with the Planning for Burlington's Major Transit Station Areas (MTSAs) to accommodate a proportional mix of residential and employment. The report can be updated to include this. The updated report can be provided during the Site Plan Application.

We trust the above addresses your concerns but please do not hesitate to contact us should you require any additional details.

Yours truly,

EXP Services Inc.





Amir Bahadori, M.Sc., P.Eng.
Senior Air Quality Engineer
Environmental Services

Ron Taylor, M.Sc., C.Chem., CIH.
Discipline Lead, Air Quality & Industrial Hygiene
Environmental Services

Appendix A –

Peer Review Memorandum, Dillon Consulting Limited– November 8, 2023

MEMO

TO:	Adam Huycke, Senior Planner, Halton Region
FROM:	Hamish Corbett-Hains, M.A.Sc., P.Eng., Associate, Dillon Consulting Limited
DATE:	November 8th, 2023
SUBJECT:	1120 Cooke Boulevard Air Quality Peer Review
OUR FILE:	23-7009

Halton Region (the Region) has retained Dillon Consulting Limited (Dillon) to provide a technical peer review of an air quality compatibility study which has been prepared for a proposed sensitive land use located at 1120 Cooke Boulevard in Burlington, Ontario (the Proposed Development). Specifically, this peer review considers the following report:

1. *1120 Cooke Boulevard, Burlington, ON, D-6 Land Use Compatibility – Air Quality Assessment,* prepared by EXP Services Inc., dated June 20th, 2023 (the Report).

In addition to the Report, Dillon reviewed two previous versions of the assessment dated November 17th, 2021 and February 16th, 2023. The earlier versions of the Report were reviewed to understand the full project context. Dillon reviewed the Report for conformance with the relevant Acts, Regulations, Policies, and Guidelines, including:

1. Ontario's *Environmental Protection Act (*the EPA*);*
2. *Ontario Regulation 419/05 – Local Air Quality* (O.Reg. 419);
3. Ontario's *Provincial Policy Statement 2020* (the PPS)
4. The Ministry of the Environment, Conservation and Parks' (MECP) *D-Series of Guidelines for Land Use Compatibility* (D-Series Guidelines);
5. Relevant MECP Guidelines for use with air dispersion modelling assessments (i.e.; *Guideline A-10 – Procedure for Preparing an ESDM Report* and *Guideline A-11 – Air Dispersion Modelling Guideline for Ontario)*;
6. Halton Region's *Air Quality Guidelines*; and
7. Halton Region's *Land Use Compatibility Guidelines.*

With respect to the Report, in consideration of the relevant Acts, Regulations, Policies, and Guidelines, Dillon notes the following:

1. In general, the Report does not fully align with the requirements of the relevant guidelines for land use compatibility. The Report provides a screening of the area surrounding the Proposed Development but does not include a technical assessment demonstrating compatibility with the surrounding land uses.

2. The Report identifies vacant lands within the study area. It is unclear if any of the vacant lands are zoned to allow industrial uses. If any such lands exist, they should be included in the compatibility

assessment, including technical considerations as required, per the D-Series Guidelines and Halton Region's Land Use Compatibility Guidelines.

3. The Report has identified automotive refinishing facilities as Class I based on the requirements of the MECP'S EASR system. Some of the autobody shops have been listed as regulated under the ECA system, not the EASR system. The Report should confirm on a per-facility basis if the relevant autobody facilities are complying with the requirements of the EASR system. Otherwise the assessment should be updated to reflect Class II operations.

4. Section 5.1.2 of the Report appears to conflate fugitive dust with particulate matter emissions. Per the MECP's *Guideline A-10 – Procedure for Preparing an Emission Summary and Dispersion Modelling Report* many facilities are not required to assess fugitive dust emissions in order to obtain their environmental permissions. For this reason, the D-Series of Guidelines requires the assessment of fugitive dust within a land use compatibility context. The Report should be updated to include consideration of the potential for fugitive dust impacts.

5. Section 6 of the Report does not contain sufficient technical details to demonstrate compatibility with the surrounding uses. While the Report has included qualitative observations which may help make a determination around compatibility, the necessary quantitative details have not been included, such as emissions quantification and air dispersion modelling. A number of Class II and Class III industries have been identified for which detailed technical assessments should be provided per the D-Series Guidelines and Halton Region's Land Use Compatibility Guidelines.

6. Section 6 of the Report states that impacts from neighbouring industries on the Proposed Development "cannot be quantified at this time". It is unclear why impacts cannot be quantified, as is typically done in a land use compatibility assessment. As potential impacts have not been quantified at this time, the Report has not demonstrated that compatibility between the Proposed Development and the surrounding industries can be achieved.

7. Section 6 of the Report relies on the presence of existing sensitive receptors within the study area as justification for the Proposed Development being compatible. The existing sensitive receptors are not suitable analogues, as they appear to be lower in height than the Proposed Development, further from many of the identified industries than the Proposed Development, or in a different wind direction from existing industries when compared to the Proposed Development. Using the presence of existing receptors without an accompanying air dispersion modelling assessment comparing predicted concentrations at actual receptor locations is typically insufficient to demonstrate compatibility.

8. Section 6 of the Report appears to state that any facility which has no environmental permissions (EASR or ECA) would not release any contaminants to the environment. This is an inappropriate assumption and should not be relied upon in a land use compatibility assessment.

9. Section 6 of the Report refers to an assessment with receptors at varying floor heights. It is unclear what assessment this is referring to. The Report should be updated to provide further details of any technical assessment which was performed.

10. Section 6.3 of the report states that there is a potential for odours at the Proposed Development. Mitigation options have been recommended to minimize the impact of these odours. Typically, when recommending mitigation, it is important to understand the predicted concentration of odours at the proposed receptor. In some cases, such as very high odour concentrations, at-receptor mitigation may not be sufficient to demonstrate compatibility. Additionally, the Report should address how odours will be managed at outdoor locations such as balconies which would represent odour-sensitive receptors.

11. Section 8 of the Report states that "the majority of the facilities identified within the Study Area are not expected to pose an unacceptable air quality, dust or odour issue to the Subject Site." As compatibility cannot be determined based on the majority of surrounding uses, the Report should be updated to consider every industrial use in the Study Area with a full technical assessment where required. Any industry within the Potential Area of Influence per the D-Series Guidelines and Halton Region's Land Use Compatibility Guidelines should be studied in further detail to determine if compatibility can be achieved with the Proposed Development.

12. The Report has not assessed the potential for the Proposed Development to impact the ability of the surrounding industries to operate in accordance with their environmental permissions (i.e. EASR and ECA requirements). The introduction of new elevated receptors within the study area may present compliance issues for existing industries, which should be quantified.

The Report should be updated to address the comments contained within this memo in order to justify compatibility between the Proposed Development and the surrounding land uses, and satisfy the requirements of the relevant Acts, Regulations, Policies, and Guidelines. Should you have any questions about our review, please don't hesitate to contact us.

Sincerely,

DILLON CONSULTING LIMITED



Hamish Corbett-Hains, M.A.Sc., P.Eng.
Associate, Air Quality Engineer