

600 Southgate Drive Guelph ON Canada N1G 4P6 Tel: +1.519.823.1311 Fax: +1.519.823.1316

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Maurice Luchich Glen Schnarr & Associates Inc. 700-10 Kingsbridge Garden Circle Mississauga, ON L5R 3K6 T: 905.568.8888 x267 E: mauricel@gsai.ca

Re: Response to Peer Review Lakeview Village RWDI Reference No. 1804164

Dear Maurice,

The purpose of this letter is to respond to review comments, dated October 26, 2020, provided by Wood Environment & Infrastructure Solutions (Wood). Wood reviewed and commented with respect to air quality aspects of the following two RWDI reports:

- 1. Lakeview Village, Air Quality and Noise Land-Use Feasibility Assessment, October 4, 2018
- 2. Lakeview Village Lands, Emissions from Local Industries, December 3, 2019

The first report above was a review of land uses surrounding the proposed Lakeview Village development, and their potential for creating air quality and/or noise impacts on the proposed development. The second report addressed follow-on air quality studies (field odour survey and dispersion modelling) that had recommended in the first report.

Wood summarized its review in five main bullets. The following paragraphs respond to each of those bullets.

1. Identification and classification of all industrial facilities with the potential to influence air quality at the proposed development

In section 4.2 of its review, Wood stated that "further information on all facilities in the study is warranted to exclude them from further discussions of land use compatibility."

To respond to this item, RWDI has catalogued the facilities in the vicinity of the proposed development and tabulated our evaluation of them. Our approach to the evaluation of the industries relied on experience and professional judgement, with the aid of the following guidelines published by the Ontario Ministry of Environment Conservation and Parks (MECP).

- *D-6, Compatibility between Industrial Facilities* (<u>https://www.ontario.ca/page/d-6-compatibility-between-industrial-facilities</u>);
- D-6-1 Industrial Classification Criteria (<u>https://www.ontario.ca/page/d-6-1-industrial-categorization-criteria</u>)

Guideline D-6 recommends that studies be completed for air quality noise and vibration. However, D-6 also provides planners with a 3-category classification scheme for industries (small, medium, large), with an approximate influence area for each category that can be used in the absence of studies. The effect





of this guidance is that studies are only needed in instances of encroachment within the D-6 influence areas.

Therefore, RWDI's approach was two staged. The first stage was to review all industries in the area and identify any that may encroach within the D-6 influence areas with respect to the proposed development. This stage of work was discussed in our October 2018 report. The second stage was detailed study of the identified industries. The detailed study consisted of a field odour survey and dispersion modelling and was discussed in our December 2019 report. To satisfy Wood's request for further information on the industries, we have provided a more detailed documentation of the first stage of work (industry review) in the following paragraphs and tables.

1.1 D-6 Influence Areas

The D-6 industrial categories and potential influence areas are set out in Table 1.

Table 1: D-6 Industrial Classes and Influence Areas

Class	Description	Potential Influence Area (m)
I	small scale, self-contained, packaged product, low throughput, infrequent noise, odour, dust, vibration	70
II	medium scale, outdoor inventory, frequent movement of product during daytime, shift operations, occasional noise, odour, dust and/or vibration at minor annoyance levels	300
III	large scale, outdoor inventory, large throughput, continuous movement of products/employees, shift operations, frequent outputs of major annoyance	1000

1.2 Facilities within 70m of the Proposed Development

There are several facilities in the vicinity of the Lakeview Village area that encroach within the 70m potential influence area of Class I industries. Table 2 lists the facilities, and the attached Figure 1 is a plan of the area, showing their locations. Table 3 presents RWDI's air quality evaluation of the facilities, based on the criteria in D-6-1. The criteria are divided into four main categories: outputs, scale, process, and operational intensity.

As can be seen in Table 3, all the industries within 70m of the development area are small to medium in scale and enclosed, with little or no outdoor inventory or activity. The level of production at these facilities is also small to medium, as evidenced by the small number of loading bays and the lack of significant activity observed during the site visits. All sites have small, paved yards with little potential for fugitive dust emissions. On this basis, RWDI categorizes all these facilities as Class I from an air quality perspective.

During the initial site visit, odours were detected at two of the industries listed in Table 3: Plasterform Inc. and Long Branch Foundry. Consequently, RWDI recommended a detailed odour study of the area, in the form of a field survey using a portable olfactometer. RWDI did not recommend any detailed dust study, as no significant potential for dust emissions was observed at any of the facilities. However, field



observers conducting the odour survey were instructed to be on the alert for evidence of significant dust emissions (ultimately, none was observed).

ID	Name	Location	Туре
1	Canada Post Port Credit Depot	890 Rangeview Road	Postal depot
2	Interior Manufacturing Group (IMG)	895 Rangeview Rd.	Retail interior furnishings, assembly
3	Interior Manufacturing Group (IMG)	992 Rangeview Rd.	Retail interior furnishings, plastics/digital printing
4	Interior Manufacturing Group (IMG)	996 Rangeview Rd.	Retail interior furnishings, assembly
5	Genco Marine	1008 Rangeview Rd.	Boat supply store
6	Stratos Industries	1024 Rangeview Rd.	Cabinet making
7	Xtreme Tire Garage	1044 Rangeview Rd.	Car repair and maintenance
8	Long Branch Foundry	1062 Rangeview Rd.	Aluminum and copper alloy castings
9	Kotyck Bros Ltd EMCO	1076 Rangeview Rd.	Distributor of construction products
10	Unoccupied	1083 Rangeview Rd.	Unoccupied
11	Allegion Canada	1076 Lakeshore Rd.	Doorway safety/security products
12	Plasterform Inc	1180 Lakeshore Rd. E.	Architectural castings

Table 2: Facilities within 70m of Development Area

We noted that Plasterform Inc. has moderately tall stacks on its roof, suggesting that dispersion modelling was needed to verify that emissions from these stacks would comply with air quality standards at new elevated points of reception on proposed multi-storey residential buildings in the development area. Consequently, RWDI also recommended dispersion modelling of the Plasterform Inc. facility. None of the other facilities have tall stacks.

The findings of the field odour survey and dispersion modelling were documented in our December 3, 2019 report.



Industry Name Odour/Dust Outputs		Scale	Process	Intensity	Class based on Air Quality	
Canada Post	None observed; no potential sources	small; no outside storage	enclosed; no ECA; no industrial process	low; no truck bays	Non-industrial	
IMG 895 Rangeview	'n	medium; no outside storage	enclosed; no ECA; no significant emission sources	low; 3 loading bays; small yard	I	
IMG 992 Rangeview	II	small; minor outside storage	п	low; 2 loading bays; small yard	I	
IMG 996 Rangeview	n	small; no outside storage	п	low; 3 loading bays; small yard	I	
Genco Marine	"	small; no outside storage	П	low; no loading bays; small yard	Non-industrial	
Stratos Industries	u	small; no outside storage	II	low; no loading bays; small yard	I	
Xtreme Tire	n	small; no outside storage		low; 6 bays for passenger vehicles; medium yard	I	
Long Branch Foundry	slight odour observed; no significant dust source	small; minor outside storage	enclosed; ECA for furnace exhaust, baghouse, heater	low; 2 truck bays; small yard	I	
Kotyck Bros. Ltd.	None observed; no potential sources	small; no outside storage	enclosed; no ECA; no significant emission sources	low; 1 truck bay	I	
Unoccupied	"	п	п	Unoccupied	Non-Industrial	
Allegion Canada	None observed; no potential sources	medium; no outside storage	enclosed; ECA for HVAC, lock assembly, compressor, welding	medium; 6 truck bays	I	
Plasterform Inc.	odour observed; no dust sources; residences < 70m away	medium; minimal outside storage	enclosed; ECA for 8 paint booths, baghouse, 5 general exhausts, 3 boilers, HVAC	medium; 5 truck bays	I	

Table 3: Air Quality Evaluation of Facilities within 70m of the Development Area

1.3 Facilities between 70m and 300m away from the Development Area

In addition to the facilities located within 70m of the Lakeview Village development area, there are also numerous facilities between 70m and 300m away from the development area. These facilities are listed in Table 4. Their locations are shown in the attached Figure 1.

Table 4: Facilities between 70m and 300m a	away from the Development Area
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ID	Name	Location	Туре
13	Komandor	863 Rangeview Rd.	Closets, doors, carpentry
14	IMG	850 Rangeview Rd.	Metal plant/wood assembly
15	Filamat Composites Inc.	880 Rangeview Rd.	Fibreglas-reinforced plastic products
16	Unknown	Rangeview Road	Unknown
17	Oplenac	695 Rangeview Rd.	Serbian Cultural Association
18	Wonderland Food & Equipment	930 Lakefront Promenade	Concession items distributor
19	City Marine	925 Lakefront Promenade	Boat storage and supplies
20	Toronto Fabricating & MFG Co.	1021 Rangeview Rd.	Landscape and site furnishings
21	Unknown 2	1025 Rangeview Rd.	Unknown
22	Gaspard	1035 Rangeview Rd.	Manufacturer of academic vestments and choir attire
23	Wicox Door Service Inc.	1045 Rangeview Rd.	Commercial door installation and service
24	llsco	1050 Lakeshore Rd.	Manufacturer of power and grounding connectors
25	Oasis	Lakeshore Rd.	Convention Centre
26	A. J. Lanzarotta	1000 Lakeshore Rd.	Produce Wholesaler
27	IMG	974 Lakeshore Rd.	Wood plant
28	Unknown 3	Lakeshore Rd.	Unknown
29	ABC Fire Door	920 Lakeshore Rd.	Hollow metal doors and frames
30	Tim Horton's	Lakeshore Rd.	Restaurant
31	Meaty Meats Inc.	896 Lakeshore Rd.	Food produce company
32	Chantler Packages	Lakeshore Rd.	Plastic bag manufacturing and printing
33	Unknown 4	1200 Lakeshore Rd.	Unknown
34	Grohe Canada	1226 Lakeshore Rd.	Bathroom and kitchen fittings

Table 5 presents RWDI's air quality evaluation of these industries. The majority of the facilities are similar to those located within 70m of the development area, and are classified as Class I. As such, they do not encroach within the potential influence area with respect to the proposed Lakeview Village development.

The only exception is Filamat Composites Inc., which is medium in scale, has outdoor storage of inventory, and has observable odours. Filamat is categorized as Class II. Odours were observed there during the initial site visit, which contributed to our recommendation of a field odour survey. In addition, the Filamat facility has a number of moderately tall stacks, which led us to recommend dispersion modelling to verify that emissions from the stacks would comply with air quality standards at new elevated points of reception associated with the proposed Lakeview Village development. The results of these detailed studies were documented in our December 3, 2019 report.

Industry Name	Odour/Dust Outputs	Scale	Process	Intensity	Class based on Air Quality	
Komandor	None observed; no potential sources	Medium; no outside storage	enclosed; no ECA; no significant emission sources	Medium; 14 truck bays	I	
IMG 850 Rangeview	п	п	п	Medium; 11 truck bays	I	
Filamat Composites Inc.	Odour observed; no dust source	Medium; outside inventory	Enclosed process; ECA for 3 resin spray booths; 2 chemical storage areas; fugitive emissions and heaters	Medium; 4-5 truck bays, medium sized yard with inventory	II	
Unknown	None observed; no potential sources	Small; minimal outside storage	enclosed; no ECA; no significant emission sources	Low; 4 truck bays	I	
Oplenac	п	Small; no outside storage	п	Low	Non- industrial	
Wonderland Food & Equipment	п	Medium-small; no outside storage	n	Low; 2 truck bays	I	
City Marine	п	Small; outside storage of boats	No significant emission sources	Low	Non- industrial	
Toronto Fabricating & MFG Co.	n	Small; minimal outside storage	enclosed; no ECA; no significant emission sources	Low; 1 truck bay	I	
Unknown 2	II	Small; no outside storage	enclosed; no ECA; no significant emission sources	Small; 3 truck bays	I	
Gaspard	п	п	П	Small; 3 truck bays	I	

Table 5: Air Quality Evaluation of Facilities between 70m and 300m from the Development Area



Industry Name	Odour/Dust Outputs	Scale	Process	Intensity	Class based on Air Quality	
Wicox Door Service Inc.	п	Small; minimal outside storage	U	Low; 1 bay	I	
llsco	n	Small; no outside storage	Enclosed; ECA for an aluminum chip recycling exhaust, DUSTKOP dust collector, and a cooling tower	luminum chip recycling xhaust, DUSTKOP dust ollector, and a cooling		
Oasis	п	п	enclosed; no ECA; no significant emission sources	Low	Non- industrial	
A. J. Lanzarotta	Odour observed; no dust source; residences 70m away	Medium-small; no outside storage	enclosed; no ECA; no significant emission sources	Medium; 7-8 truck bays	I	
IMG 974 Lakeshore	None observed; no potential sources; residences ~70m away	Medium-small; no outside storage	Enclosed; no ECA; dust collector evident			
Unknown 3	n	Medium-small; no outside storage	Enclosed; no ECA	Medium; 6 truck bays	1	
ABC Fire Door	п	Medium-small; no outside storage	enclosed; no ECA; no significant emission sources	Low; 2 truck bays	1	
Tim Horton's	п	Small	enclosed; no ECA; no significant emission sources	Low	Non- industrial	
Meaty Meats Inc.	п	Small; no outside storage	enclosed; no ECA; no significant emission sources	Low; 3 truck bays	I	
Chantler Packages	II	Small; no outside storage	enclosed; ECA for thermoplastic sheet bays extrusion, flexographic printing, micro perforator, and bag-making		I	
Unknown 4	None observed; no significant sources; residences 30m away	Medium-small; no outside storage	enclosed; no ECA; no significant emission sources			
Grohe	п	Medium small; no outside storage	enclosed; no ECA; no Low significant emission sources		I	

1.4 Facilities between 300m and 1000m away from the Proposed Development

There are no significant industries beyond 300m away from the development and none have been tabulated here.

2. Potential for Dust Effects from Outdoor Activities at Long Branch Foundry

In Section 4.3 of its review, Wood stated that the Long Branch Foundry site "appears to be paved, however the aerial images depict discolorations, stockpiling and evidence of notable silt loading on roadways."

Long Branch Foundry has waste bins and a small amount of outdoor inventory, but no stockpiling of bulk materials. The pavement within the fenced enclosure is discolored with what may be silt. RWDI's opinion, however, is that the potential for dust emissions from this area is very low, for the following reasons.

- The yard is paved and very small, with little room for trucks or other equipment to maneuver. Equipment travel speeds are expected to be very slow.
- No equipment activity was noted during site visits. The facility has only a single truck bay (at the front) which, combined with the small size of the facility and yard suggests that the frequency of equipment movements is low.
- No dust emission was noted during any field visits.

Therefore, RWDI's professional opinion is that Long Branch Foundry is not a concern with regard to dust emissions. The facility does have observable odours and this is discussed further below.

3. Frequency and Severity of Odour Effects

Odour effects were studied by means of field odour surveys, documented in detail our December 3, 2019 report. The report presented odour observations that were made at a grid of observation points, on 16 days distributed from June through October 2019. RWDI subsequently completed four additional days of odour observations, in late November and December 2019, bringing the total to 20 days. Overall, odours from industrial facilities in the area were observed on 15 of the 20 days.

To respond to the request from Wood for more information on frequency and severity of odours, RWDI has prepared Table 6 summarizing the observations. Table 6 lists all of the industrial facilities for which odours emissions were detected over the 20 field days (only 4 industries in total). No odours were detected for any other industrial facilities in the area.

In the case of Long Branch Foundry and AJ Lanzarotta, no odours were detected on 16 (80%) of the field days. Odours were detected on 4 (20%) of the field days, and only within a short distance of each facility, with the maximum observed odour level being characterized as slight. We conclude that odours are not a significant concern for either of these facilities at distances beyond 20m away from their property boundaries.

In the case of Plasterform Inc., no odours were detected on 16 (80%) of the field days. Slight odours were detected on 3 (15%) of the field days, at distances within 200m away. Moderate odours were detected on only 2 (10%) of the 20 field days, at distances within 50m of the facility. The facility has an

existing residential neighborhood to the north of it, with the nearest residences on the order of 70m away.

The odour survey results indicate that odours from Plasterform Inc. may occasionally be moderate in magnitude within 50m of the facility, and not a significant concern beyond that distance. The area within 50m of the facility covers parts of Phase 3A and 3B of the proposed development.

In the case of Filamat Composites Inc., no odours were detected on 13 (65%) of the field days. Slight odours were observed on several field days at various distances between 100m and 1000m away from the facility. A strong odour was observed on 1 (5%) of the field days at a location within 200m of the facility. All other observed odours within 200m were slight (this occurred on 25% of the field days). The area within 200m covers most of Phase 1E of the proposed development.

A moderate odour was observed on 1 (5%) of the field days at a distance within 500m of the facility. All other observed odours at distances between 200m and 500m away were slight (this occurred on 20% of the field days). The area within 500m of the facility covers much of Phase 1 of the proposed development.

Since strong and moderate odours from Filamat were relatively isolated occurrences, the level of concern is considered moderate. Filamat has existing residential neighbourhoods approximately 270m away to the north and west of the facility. This suggests that the concern for odours applies mainly to areas within that distance. The area within 270m covers Phases 1A through E of the proposed development.

Facility Name	Distance from	None		Slight (D/T ≤ 2)		Moderate (2 < D/T < 7)		Strong (D/T ≥ 7)	
	Facility (m)	Field Days	% of Days	Field Days	% of Days	Field Days	% of Days	Field Days	% of Days
Filamat	100 - 200	13	65%	5	25%		0%	1	5%
Composites Inc.	200 - 500	13	65%	4	20%	1	5%		0%
inc.	500 - 1000	13	65%	5	25%		0%		0%
Plasterform	0 -50	16	80%	1	5%	2	10%		0%
Inc.	50 - 200	16	80%	2	10%		0%		0%
	> 200	16	80%		0%		0%		0%
Long	20 -70	16	80%	3	15%		0%		0%
Branch Foundry	70 - 100	16	80%	1	5%		0%		0%
roundry	> 200	16	80%		0%		0%		0%
AJ	25	16	80%	4	20%		0%		0%
Lanzarotta	> 25	16	80%		0%		0%		0%

Table 6: Magnitude and Frequency of Odours (blank space = 0)

4. Cumulative Air Quality Effects due to Presence of Multiple Facilities within the Potential Influence Area

As noted above, there are multiple Class I Industries within 70m of the proposed development, which means that the Potential Influence Areas for these industries encroach on the development area. However, there is no potential for cumulative effect, for the following reasons:

- These industries are mainly small facilities with no significant sources of emissions;
- For the most part, the locations of these industries relative to each other are such that there is little potential for emissions from multiple facilities to occur simultaneously at any location within the development area.

The only other industry whose potential influence area encroaches on the Lakeview Village development area is Filamat. There are no other industries around it with significant emission sources that could contribute a significant cumulative effect.

Therefore, RWDI is of the opinion that cumulative effects from multiple industries impacting the development simultaneously is not a concern and does not warrant any further study.

5. Details of proposed at-receptor mitigation for review by the City

Wood recommended that the "developer present the proposed at-receptor mitigation measures for review by the City." RWDI's response is as follows.

In our December 2019 report, RWDI stated that potential odour associated with industries in the area could be addressed through mitigation measures at the points of reception. This finding is based on the low frequency of anything other than slight odours during the field survey.

RWDI's opinion is that all blocks of the proposed development can be zoned for residential or mixed use, with some blocks or parts of some blocks potentially requiring receptor-based mitigation. The mitigation needs to be confirmed at the site plan approval stage when the final layouts of the blocks have been determined. Specifically, further assessment of mitigation is needed at the site plan approval stage for any proposed site plans that include sensitive uses within 50m of Plasterform Inc., 20m of Long Branch Foundry or 270m of Filamat Composites Inc.

Mitigation measures, where confirmed to be needed, may include the following.

- Air conditioning for residential buildings, allowing residents to close doors and windows during odour events. This could be either building central air filtration system or individual A/C units.
- Air conditioning systems should be designed to provide positive pressurization of the units and should have capacity for gaseous filtering to control odours. The filter specification should be established by the HVAC designers at the time of design.
- Placement of fresh air intakes for central air on the side of the building facing away from the industry.
- Limiting the size of balconies on the sides of the buildings facing Plasterform Inc. (e.g., maximum depth of 1.8m).

Wood further suggested that a warning clause be used on agreements of sale. RWDI concurs with this suggestion.



6. Other Comments within the Peer Review

6.1 Chantler Packaging, IMG, ABC Fire Door, C/S Construction

Wood, in Sections 4.2 and 4.3 of its review, states that the following industries were all identified in RWDI's Feasibility Assessment as having a greater potential for dust and odour effects:

- Chantler Packaging
- Interior Manufacturing Group (IMG)
- ABC Fire Door
- C/S Construction

RWDI's Feasibility Assessment identified Chantler Packaging as a potentially significant source of odours, on the basis of the type of manufacturing taking place there. However, no odours were detected in conjunction with this facility during the initial site visit, nor on any the 15 days of field odour survey. The facility has existing residential uses at a distance of approximately 70m to the north of it and is just under 300m away from the proposed development. RWDI categorizes Chantler Packaging as Class I and is of the opinion that no further study is required for this facility, given its separation distance from the development area and proximity to existing residences.

RWDI did not identify Interior Manufacturing Group (IMG at 974 Lakeshore Road) or ABC Fire Door as having greater potential for dust and odour effects. ORTECH, in a previous compatibility study completed in 2017, identified them as such and recommended a 70m separation distance, which in both cases, is their approximate distance from existing residences to the north. RWDI categorized both as Class I. Both facilities are well beyond 70m away from the proposed development.

With regard to C/S Construction Specialties, it is no longer located at its previous facility and is no longer present within 300m of the proposed development area.

6.2 Information on Facility Operations

In Section 4.3 of its review, Woods commented that "the odour assessment did not include information on facility operations for the facilities, therefore the odour survey cannot be linked to any specific operations..." Our December 2019 report included all available operational information for the relevant industrial facilities, which was documented in Tables 1 and 2 of the report. This information came from Environmental Compliance Approvals for these facilities, which were obtained from the Access Environment website operated by the Ontario Ministry of Environment, Conservation and Parks, and from executive summaries of Emission Summary and Dispersion Modelling (ESDM) reports provided by Plasterform Inc. and Filamat Composites Inc.. No other information on operations at these facilities was available. By conducting the field odour survey work on 20 separate days, spread over several months, RWDI believes that a reasonable cross section of both operating conditions and weather conditions were covered.



6.3 Limitations of Odour Survey

In Section 4.3 of its review, Woods commented that the "number and duration of measurements and observations at each location is limited and the conclusions drawn must consider this". RWDI believes that twenty full days of odour survey work represents a substantial body of information, compared to information typically relied upon in land use planning. It covers a reasonable cross-section of conditions at the site and is adequate for the conclusions that were reached.

6.4 Dispersion Modelling

In Section 4.3 of its review, Wood indicates that the dispersion modelling of total suspended particulate matter for Plasterform Inc. provided no insight into odour effects. RWDI wishes to point out that the dispersion modelling was not intended for that purpose. The odour effect of Plasterform was addressed by means of field odour survey, which is the only practical means of studying its odours. Plasterform's ESDM has no information on the quantity of volatile organic compounds and odours generated at its paint booths.

6.5 Detailed Air Quality Impact Assessment

In section 4.5 of its review, Woods stated that "to fully support residential land uses in the potential influence area, a detailed air quality impact assessment for the site with quantified emission rates, air quality predictions determined by air dispersion modelling or monitoring, and consideration of cumulative effects would be needed."

Our December 2019 report included all quantified emissions rates that are available for the industrial facilities that were identified for study (in Tables 1 and 2 of the report) and included air dispersion modelling based on those emission rates. We believe that this information, together with the field odour survey represents a suitable level of information at this stage of study, with further assessment recommended at the site plan approval stage.

We trust that these comments meet your present needs. Let us know if you have any questions regarding these comments.

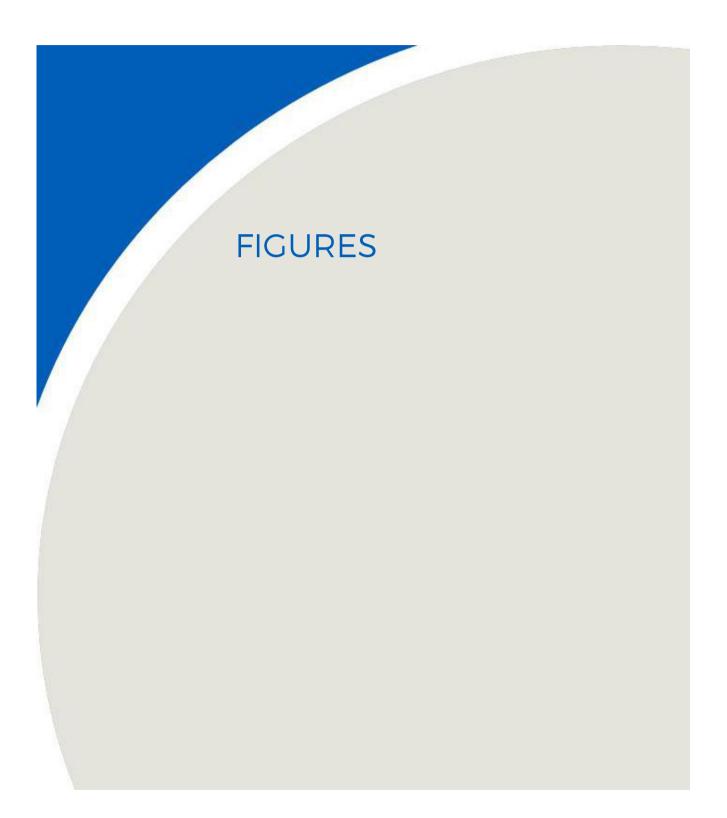
Yours truly, **RWDI**

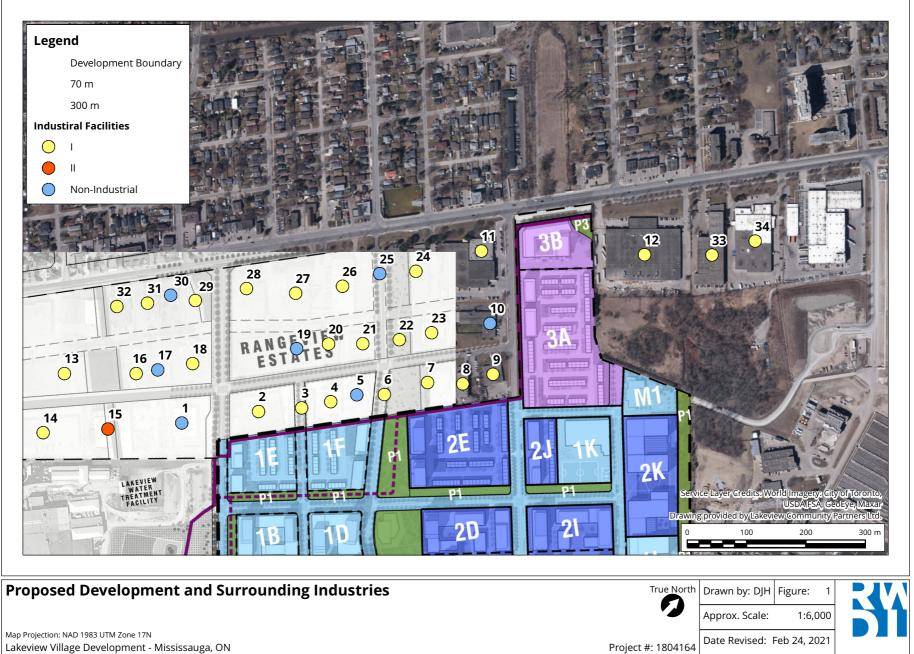
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Mike Lepage Senior Consultant, Air Quality / Principal

Dan Bacon Senior Project Manager / Principal







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