AERONAUTICAL IMPACT ASSESSMENT

15-17 Elm Street & 595 Bay Street/304-316 Yonge Street/14-80 Dundas Street

Aeronautical Impact Assessment in Response to "Request for an Amendment to Minister's Zoning Order, Ontario Regulation 10/24, City of Toronto", ERO No. 025-0348

May 2, 2025

AVIA • NG

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AIRPORT CONSULTANTS

BY EMAIL ONLY

Kyle Robinson
Chief, Facilities Redevelopment and Sustainability Officer
The Hospital for Sick Children
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RE: 15-17 Elm Street & 595 Bay Street/304-316 Yonge Street/14-80 Dundas Street
Aeronautical Impact Assessment in Response to "Request for an Amendment to Minister's Zoning Order, Ontario Regulation 10/24, City of Toronto", ERO No. 025-0348
The Hospital for Sick Children
Avia NG Project No. 22-0118-02

Dear Mr. Robinson,

At the request of the Hospital for Sick Children, Avia NG Inc. has undertaken a scoped Aeronautical Impact Assessment (AIA) of the proposed multi-tower residential developments located at **15-17 Elm Street**, Toronto, Ontario ("**15-17 Elm**") and **595 Bay Street/304-316 Yonge Street/14-80 Dundas Street**, Toronto, Ontario ("**595 Bay**"). This scoped AIA has been completed to address the requirements identified by the City of Toronto in order to determine compliance with O. Reg. 10/24 and specifically clearance from the Obstacle Limitation Surfaces (OLS) as identified by the Hospital for Sick Children.

This AIA was conducted in direct response to a request for an amendment to Map No. 345 to the Minister's Zoning Order, O. Reg. 10/24 by the owners of property at 15-17 Elm and 595 Bay that challenge the need for the protected flight path in the vicinity of these properties and is supplementary to the MZO Renewal Planning Justification Report and Technical Characteristics Memo regarding the airspace surfaces protected in O. Reg. 10/24.

Background

The proposed developments at **15-17 Elm and 595 Bay** are bounded by Elm Street to the north, Bay Street to the west, Dundas Street to the south, and Yonge Street to the east. This particular block of development underlies the first and second sections of SickKids Heliport's eastern protected flight path area which coincide with areas of critical importance to the required protection of One-Engine Inoperative recovery for helicopters departing towards the east.

The need to maintain obstacle clearance under One-Engine Inoperative scenarios is now a requirement of Canadian Aviation Regulations (CARs) 305 and Standard 325, as set out in Avia NG's report dated May 2, 2025 that is submitted for ERO No. 025-0347. If the flight path protections under O. Reg 10/24 were revised to exclude these areas, it is expected that the utility of the heliport would be diminished, with departures to the east unlikely to be authorized by ORNGE. The proposed developments at 15-17 Elm and 595 Bay have been found to intrude the flight path protections of O. Reg. 10/24. These intrusions have been identified from documentation provided by the owners for 15-17 Elm, being 17 Elm GP Inc., and 595 Bay, being KS AOB Toronto Inc. & Dundas Atrium Toronto Inc. (each an "**Applicant**" and collectively, the "**Applicants**"), and are further documented herein.

Materials Reviewed

Avia NG's assessment has been completed with reference to the protected flight path OLS identified in By-law 1432-2017 and O. Reg. 10/24 as well as the information supplied by the Applicants, and/or the City of Toronto Development Application website for review. The more critical flight path protections enacted are O. Reg. 10/24, and as such will be the primary flight path protection referenced through this AIA. The information referenced by Avia NG in evaluation of the application includes the following:

- Received from ERO Request (**Attachment A**):
    1. HOSPITAL FLIGHT PATHS – PROJECT AT 15-17 ELM STREET, TORONTO (4 - Aeronautical Report re Hospital Flight Paths - 15-17 Elm St - v1.pdf) by Charles Cormier, dated October 4, 2024, and received April 14, 2025. Copy enclosed for reference.
    2. HOSPITAL FLIGHT PATHS – PROJECT AT 595 BAY STREET, TORONTO (4 - Aeronautical Report re Hospital Flight Paths - 595 Bay St, 304- 316 Yonge St, 14-80 Dundas St W - v1.pdf) by Charles Cormier, dated September 25, 2024, and received April 14, 2025. Copy enclosed for reference.
- Additional Information from City of Toronto Website or from the Applicant (**Attachment B**):
    1. Tower Crane LR 273 Site Interaction Placement Section. (4.0_23.02.07_15-17Elm_Crane_Interaction_Plans.pdf) by McIntosh Perry, dated February 7, 2023, and received March 2023. Copy enclosed for reference.
    2. Draft Zoning By-law Amendment City of Toronto XXXX-2023 (Draft ZBA - 438-86_595Bay_Street.pdf) received from KingSett Capital on May 16 2023. Copy enclosed for reference.

Discussion and Analysis

Avia NG reviewed the information provided and observations were noted with regards to the proposed development applications for each of the addresses.

Due to the complexity and amount of information analyzed in this assessment, the observations are grouped into four sections for each 15-17 Elm and 595 Bay and illustrated in **Attachment C**:

1. General;
2. Review of 15-17 Elm
3. Review of 595 Bay; and
4. Additional Observations.

1. General

1.1. This Aeronautical Impact Assessment (AIA) is a review for the separate proposed developments at **15-17 Elm and 595 Bay**.

1.2. It was observed that elevations required for the assessment of the proposed Zoning By-law Amendment Application were not provided in reference to the Canadian Geodetic Vertical Datum (CGVD2013), and coordinates not provided in reference to WGS84 (ITRF2008) UTM Zone 17N with epoch of March 16, 2016, except where noted for the evaluation of the **595 Bay** proposed development. Given the lack of accuracy in the information provided, the findings noted herein were rounded to one decimal point.

15-17 Elm

1.3. Avia NG was in contact with the Applicant for the proposed development at **15-17 Elm** in November 2022. At that time, Avia NG was not provided with all materials that were requested of the Applicant to conduct a complete and accurate AIA. Instead, a scoped AIA was conducted on publicly available materials from the City of Toronto's development application website, including most recent materials from 2023. Coordinates and elevations were not available in these submissions to the reference datums used in a typical AIA. As such, the accuracy that is expected and required to sufficiently demonstrate compliance with the flight path protections cannot be guaranteed to a highly precise level. It is expected that, should coordinates and elevations be provided in accordance with the elevation and coordinate datums required, a vertical and lateral tolerance of +/- 1m can be expected. Given the lack of accuracy in the information provided, the findings noted herein were rounded to one decimal point.

1.4. The same materials that were assessed in 2022 were used to determine compliance or non-compliance with O. Reg. 10/24. It is important to note that all elevations and coordinates are approximate, as no materials have been submitted to Avia NG as had been requested in 2022. Refer to ***Attachment C Diagram No. 1 – 15-17 Elm Street***.

595 Bay

1.5. Avia NG has been provided materials for AIA for **595 Bay** for a Zoning By-law Amendment review (***Attachment B-2***). An AIA was conducted on the materials provided by the Applicant in July 2023, which ultimately found that there was a conflict with City of Toronto By-law 1432-2017. The Hospital for Sick Children was advised at that time to request the Applicant revise their proposed development to comply with By-law 1432-2017. Since that initial AIA was conducted, MZO O. Reg. 10/24 was enacted, which is more restrictive on airspace than By-law 1432-2017. The same information and data that was provided to conduct the AIA on 595 Bay in July 2023 has been assessed for compliance with O. Reg. 10/24. Coordinates and elevations are considered to be accurate as presented by the Applicant for AIA. Refer to ***Attachment C Diagram No. 2 – 595 Bay Street***.

1.6. In light of the latest information submitted as part of the ERO (***Attachment A-2***), an additional review was conducted for **595 Bay**. It was observed in *"4 - Aeronautical Report re Hospital Flight Paths - 595 Bay St, 304-316 Yonge St, 14-80 Dundas St W - v1"* that at some point a 5-tower iteration of the site plan has been considered by the Applicant, though it has not been circulated for review to the Hospital, or Avia NG, and could not be found on the City of Toronto Development Application Website. Using the elevations provided in the Cormier Report for 595 Bay, dated September 25, 2024, a rough assessment of the aeronautical impacts was conducted. Refer to ***Attachment C Diagram No. 3 – 595 Bay Street***.

1.7. **In the previous AIAs conducted for 15-17 Elm and 595 Bay, non-compliances with By-law 1432-2017 were observed and described. As O. Reg. 10/24 is more restrictive, these impacts to the protected flight path are exacerbated, as described further in this AIA. Both proposed developments intrude the flight path protections and should be revised to demonstrate compliance.**

2. Review of 15-17 Elm

Avia NG has reviewed the information observed within the Cormier Report for 15-17 Elm, dated October 4, 2024 and the Crane Interaction Plans provided by provided and the following observations were noted with regards to the proposed development at **15-17 Elm**:

2.1. Proposed Crane Interaction Plans dated February 7, 2023 (***Attachment B-1***) was used as reference for elevations and examined by Avia NG as part of this assessment on behalf of the Hospital for Sick Children.

2.2. The proposed development is located within the limits of the Second Section of the OLS for the Eastern Flight Path for the Hospital for Sick Children's Heliport as identified in O. Reg. 10/24.

2.3. The Crane Interaction Plans identified maximum elevations of 192.95 m ASL for parapet walls and is consistent with the Cormier Report for 15-17 Elm, dated October 4, 2024.

2.4. The proposed portion of the development with an identified elevation of 192.95m ASL is represented by **Evaluation Point 1-1** in Avia NG's enclosed ***Attachment C Diagram No. 1 – 15-17 Elm Street***. The approximate OLS elevation at this point is 168.27 m ASL, which would result in a vertical intrusion to the protected Eastern Flight Path of approximately 24.6 m.

2.5. The proposed portion of the development with an identified elevation of 192.95m ASL is represented by **Evaluation Point 1-2** in Avia NG's enclosed ***Attachment C Diagram No. 1 – 15-17 Elm Street***. The approximate OLS elevation at this point is 168.77 m ASL, which would result in a vertical intrusion to the protected Eastern Flight Path of approximately 24.1 m.

2.6. The proposed development at **15-17 Elm Street** intrudes the protected flight path.

3. Review of 595 Bay St

Avia NG has reviewed the information observed within the proposed zoning by-law amendment received on May 16, 2023, provided by the Applicant for the first AIA conducted to determine compliance with O. Reg. 10/24 and the following observations were noted with regards to the proposed development at **595 Bay,** rounded to one decimal point:

3.1. The proposed development is located within the limits of the First and Second Sections of the OLS for the Eastern Flight Path for the Hospital for Sick Children's Heliport as identified in O. Reg. 10/24.

3.2. The proposed portion of the development with an identified elevation of 170.74m ASL, within the First Section of the OLS, is represented by **Evaluation Point 2-3** in Avia NG's enclosed ***Attachment C Diagram No. 2 - 595 Bay Street***. The OLS elevation at this point is 148.5 m ASL, which would result in a vertical intrusion to the protected Eastern Flight Path of 22.2 m. This is not including any exceptions as identified in the proposed Zoning By-law Amendment for **595 Bay**.

3.3. The proposed portion of the development with an identified elevation of 176.74m ASL, within the First Section of the OLS, is represented by **Evaluation Point 2-4** in Avia NG's enclosed ***Attachment C Diagram No. 2 - 595 Bay Street***. The OLS elevation at this point is 148.5 m ASL, which would result in a vertical intrusion to the protected Eastern Flight Path of 28.2 m. This is including a 6 m vertical exception 438-86 (1)(e)(i).

3.4. The proposed portion of the development with an identified elevation of 173.74 m ASL, within the Second Section of the OLS, is represented by **Evaluation Point 2-5** in Avia NG's enclosed ***Attachment C Diagram No. 2 - 595 Bay Street.*** The OLS elevation at this point is 170.21 m ASL, which would result in a vertical intrusion to the protected Eastern Flight Path of 3.5 m. This is not including any exceptions.

3.5. The proposed portion of the development with an identified elevation of 179.74 m ASL, within the Second Section of the OLS, is represented by **Evaluation Point 2-6** in Avia NG's enclosed ***Attachment C Diagram No. 2 - 595 Bay Street.*** The OLS elevation at this point is 170.21 m ASL, which would result in a vertical

intrusion to the protected Eastern Flight Path of 9.5 m. This clearance is including a 6 m vertical exception 438-86 (1)(e)(i).

3.6. The proposed portion of the development with an identified elevation of 202.74m ASL, within the Second Section of the OLS, is represented by **Evaluation Point 2-7** in Avia NG's enclosed ***Attachment C Diagram No. 2 - 595 Bay Street.*** The OLS elevation at this point is 177.87 m ASL, which would result in a vertical intrusion to the protected Eastern Flight Path of 24.9 m. This is not including any exceptions.

3.7. The proposed portion of the development with an identified elevation of 208.74m ASL, within the Second Section of the OLS, is represented by **Evaluation Point 2-8** in Avia NG's enclosed ***Attachment C Diagram No. 2 - 595 Bay Street***. The OLS elevation at this point is 177.87 m ASL, which would result in a vertical intrusion to the protected Eastern Flight Path of 30.9 m. This is including a 6 m vertical exception 438-86 (1)(e)(i).

3.8. Each of the proposed towers at **595 Bay** intrude the protected flight path.

Avia NG has reviewed the information observed within the Cormier Report for 595 Bay, dated September 25, 2024 regarding a 5-tower iteration of the Site Plan. Given the report did not include geographic coordinates, full Site Plan or full architectural drawing set for review, and some elevations were quoted without vertical datum, the following findings were rounded to the nearest one decimal point:

3.9. Tower 1 of the proposed development, with an identified elevation of 357.14 m ASL, within the First Section of the OLS, is represented by **Evaluation Point 3-9** in Avia NG's enclosed ***Attachment C Diagram No. 3 - 595 Bay Street.*** The OLS elevation at this point is 148.5 m ASL, which would result in a vertical intrusion to the protected Eastern Flight Path of approximately 209.0 m.

3.10. Tower 2 of the proposed development, with an identified elevation of 357.14 m ASL, within the First Section of the OLS, is represented by **Evaluation Point 3-10** in Avia NG's enclosed ***Attachment C Diagram No. 3 - 595 Bay Street***. The OLS elevation at this point is 148.5 m ASL which would result in a vertical intrusion to the protected Eastern Flight Path of approximately 209.0 m.

3.11. Tower 3 of the proposed development, with an identified elevation of 185.14 m ASL, within the Second Section of the OLS, is represented by **Evaluation Point 3-11** in Avia NG's enclosed ***Attachment C Diagram No. 3 - 595 Bay Street***. The approximate OLS elevation at this point is 164.43 m ASL, which would result in a vertical intrusion to the protected Eastern Flight Path of approximately 21.0 m.

3.12. Tower 4 of the proposed development, with an identified elevation of 198.14 m ASL, within the Second Section of the OLS, is represented by **Evaluation Point 3-12** in Avia NG's enclosed ***Attachment C Diagram No. 3 - 595 Bay Street.*** The approximate OLS elevation at this point is 172.61 m ASL, which would result in a vertical intrusion to the protected Eastern Flight Path of approximately 25.5 m.

3.13. Tower 5 of the proposed development, with an identified elevation of 206.04 m ASL, within the second Section of the OLS, is represented by **Evaluation Point 3-13** in Avia NG's enclosed ***Attachment C Diagram No. 3 - 595 Bay Street***. The approximate OLS elevation at this point is 177.86 m ASL, which would result in a vertical intrusion to the protected Eastern Flight Path of approximately 28.0 m.

3.14. Each of the proposed towers in the 5-tower iteration of the diagram for **595 Bay** intrude the protected flight path by a substantial amount, ranging from 21.0 m to 209.0 m.

4. Additional Observations

4.1. The Applicants should revise each of their proposed developments to comply with the flight path protections described in O. Reg. 10/24 and By-law 1432-2017 as applicable. The Applicants will be required to submit for proposed zoning by-law amendment, site plan control application and construction activities to ensure compliance with O. Reg. 10/24 and By-law 1432-2017 is adhered to.

4.2. It is possible for the Applicants to propose developments that could comply with O. Reg. 10/24 and By-law 1432-2017 as applicable. In fact, on December 17 and 18, 2024, Council for the City of Toronto adopted recommendations to accept a settlement from the owners of 595 Bay to resolve an Ontario Land Tribunal appeal for a development that is substantially lower in height than what was proposed by the Applicant in July 2023, or in the 5-tower iteration included with the Cormier Report. This revised proposal includes a new 25-storey residential building to the eastern portion of the 595 Bay site and a 6 or 7-storey addition on top of the existing 15-storey commercial building. The figures for the revised development for 595 Bay can be found on the City's website: https://secure.toronto.ca/council/agenda-item.do?item=2024.CC24.14. The Applicant in its settlement offer to the City of Toronto, which was accepted, also specifically indicated an intention to comply with Zoning By-law 1432-2017 and the Minister's Zoning Order 10/24.

Conclusions

Based on the foregoing, Avia NG has identified that the proposed information presented in the Charles Cormier report dated October 4, 2024 for the proposed development of **15-17 Elm Street** and the proposed information presented in the Charles Cormier report dated September 25, 2024for **595 Bay** as presented to Avia NG in the ERO request and documented within this letter and enclosures intrude protected flight path of the Obstacle Limitation Surfaces (OLS) for the Hospital for Sick Children Heliport as identified by O. Reg. 10/24.

The Applicants for 15-17 Elm Street and 595 Bay Street/304-316 Yonge Street/14-80 Dundas Street have requested that their developments be removed from the O. Reg. 10/24 flight path protections. This request cannot be supported in the interest of preservation of heliport use. Exemptions from the flight path protections under O. Reg. 10/24 are not recommended by Avia NG as the cumulative risk of doing so will erode safety margins for the medevac air operator utilizing the heliport and lead to an increased likelihood of diminished heliport utility, especially given the location and proximity the proposed developments from the Hospital for Sick Children heliport. Flight path protections for the Hospital for Sick Children were established in what is an already compromised situation due to the urban environment, whereby ideal protections, aimed at reducing operational restrictions and maximizing heliport usability, cannot be practically established based on the existing obstacle environment. **Allowing any degradation of the existing protections under O. Reg. 10/24 could risk compromising the utility of the heliport's operation and could lead to a closure of the Eastern Flight Path or use for arrivals only.**

Should you have any questions or concerns, please do not hesitate to contact the undersigned.

Sincerely,
AVIA NG INC.

Dan Fox, MAvnMgt, AAP
Senior Regulatory and Compliance Specialist
Aviation Planning and Advisory

Joshua Horst, MAvnMgt, AvMP
Senior Aviation Planner, Practice Lead
Aviation Planning and Advisory

cc: Kyle Robinson and Marty Putyra, SickKids
Isaac Tang and Pitman Patterson – Borden Ladner Gervais LLP, – Legal Counsel for the Hospital for Sick Children

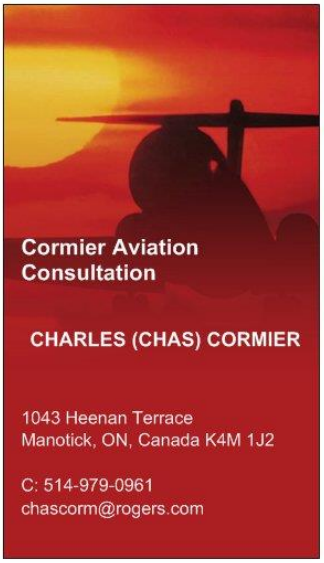
Enc.:

- *HOSPITAL FLIGHT PATHS – PROJECT AT 15-17 ELM STREET, TORONTO - v1 dated October 4, 2024*
- *HOSPITAL FLIGHT PATHS – PROJECT AT 595 BAY STREET, TORONTO dated September 25, 2024*
- *Tower Crane LR 273 Site Interaction Placement Section dated February 7, 2023*
- *Proposed Draft ZBA – 438-86_595Bay_Street*
- *Diagram No. 1 - 15-17 Elm Street – Avia NG Aeronautical Impact Assessment 15-17 Elm Street Dated April 23, 2025*
- *Diagram No. 2 – 595 Bay Street – Avia NG Aeronautical Impact Assessment 15-17 Elm Street Dated April 23, 2025*
- *Diagram No. 3 – 595 Bay Street – Avia NG Aeronautical Impact Assessment 15-17 Elm Street Dated April 23, 2025*

Attachment A

ERO Request Supporting Documentation

1. HOSPITAL FLIGHT PATHS – PROJECT AT 15-17 ELM STREET, TORONTO - v1 dated October 4, 2024
2. HOSPITAL FLIGHT PATHS – PROJECT AT 595 BAY STREET, TORONTO dated September 25, 2024



Charles (Chas) Cormier
Aviation Consultant
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Manotick, ON K4M 1J2

October 4, 2024

17 Elm GP Inc.
Attention: Lyle Levine
1840 Eglinton Avenue West, Suite 202
Toronto, Ontario M6E 2J4

HOSPITAL FLIGHT PATHS – PROJECT AT 15-17 ELM STREET, TORONTO

Ref: A. Hospital Heliport Zoning Regulations SOR/2017-291
B. Ont Reg 10/24 MZO Map 345 Hospital for Sick Children issued January 26, 2024
C. Transport Canada - Canadian Aviation Regulations 304 – Heliport Standards CARs 325
D. Partisans Drawings Project No.88 15-17 Elm Street dated July 19, 2022

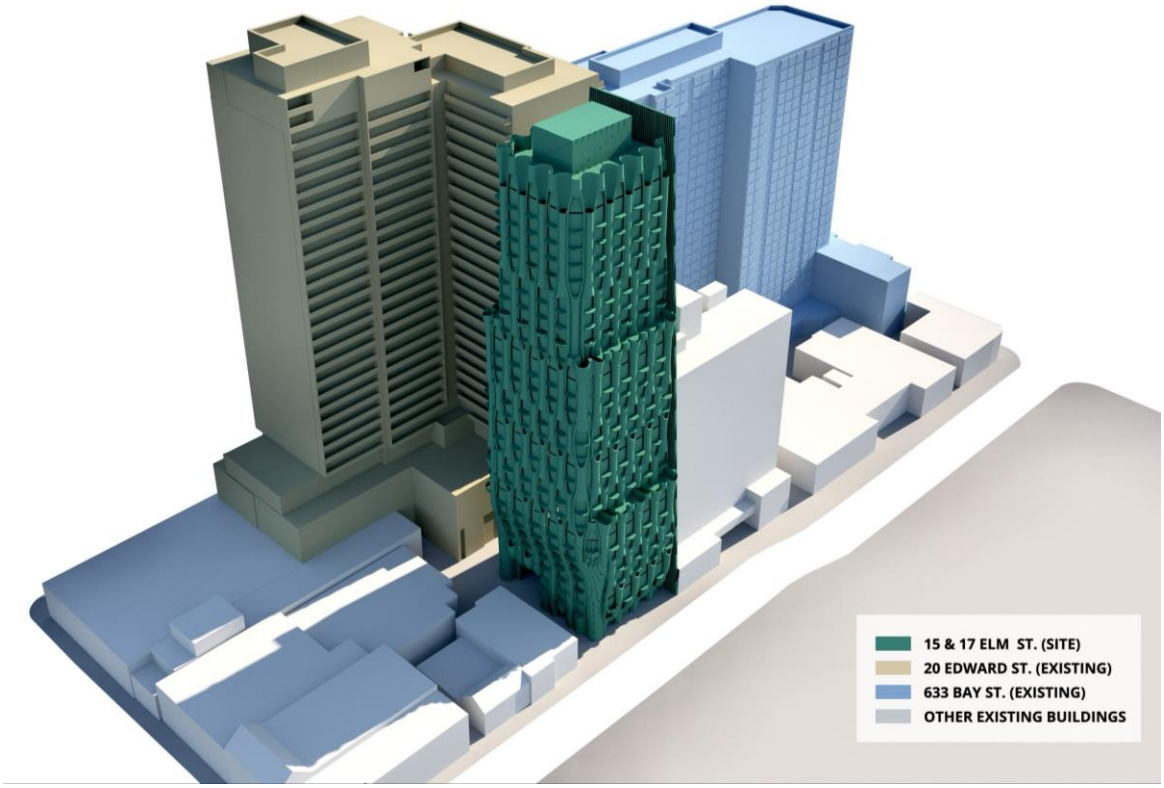
This is an update to a previous analysis dated August 10, 2022, of a proposed high-rise building project at 15-17 Elm Street in Toronto, as related to the flight paths to Sick Kids and St. Michael's Hospitals, that were governed by the Toronto By-Law at Reference A. There are new Obstacle Limitation Surfaces zoned by Ontario Municipal Zoning Orders issued January 26, 2024, at Reference B, that specify much lower surfaces. This analysis will report the effects to the project by the new MZO serving Sick Kids Heliport. Ultimately, I conclude that Ministerial Zoning Order, Ont Reg 10/24 imposes significant new constraints on the proposed project without sufficient technical justification or rationale for the expanded flight path protections.

As a consultant in aeronautical information services, in recent years I have provided services to numerous airports and to developers, with concerns for buildings, antennae, or wind turbines proposed in vicinity of aviation facilities. Most notably in Ontario, I have assisted the airports at Collingwood, Chatham-Kent, Toronto/Downsview, Kincardine, and Billy Bishop Toronto City. As well, I have provided advice to some 50 developers in Toronto regarding possible effects to the heliports atop St. Michael's Hospital (SMH) and the Hospital for Sick Children (HSC), and to the airports in the vicinity. The results were that some projects were found to have no detrimental effects to the airports, while others where there could be effects, building plans were altered or flight procedures were modified, to preserve accessibility to the airport. The purpose of my work was always to preserve safe and full access to airports, while permitting new structures to be erected as close and as high as the regulations permit.

Planning Comments. The City of Toronto states “In order to confirm there are no issues with the flight path, provide an aeronautical assessment to confirm there are no intrusions. This assessment should include a qualitative analysis and confirmation that there are no maintenance or projection issues associated with the development and that construction methods have been considered. As such, the assessment must also review the draft bylaw and specifically any referenced projections”.

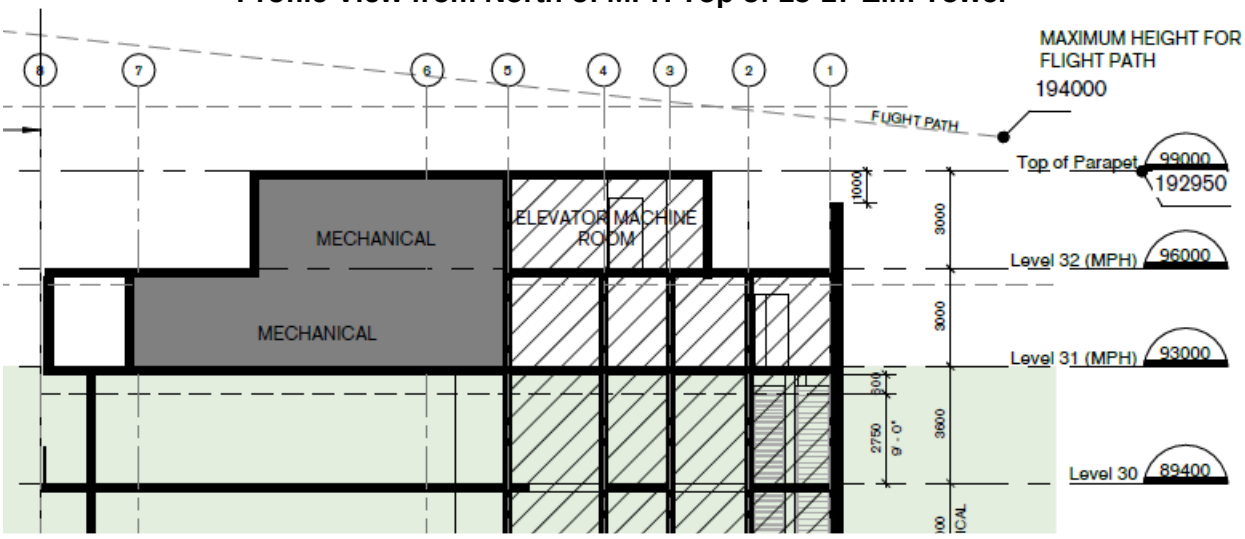
Project at 15-17 Elm Street. The property at 15-17 Elm Street is located on the south side of Elm Street, and the eastern edge is 66m west of Yonge Street. The footprint is approximately 30m north-south by 27m wide, and grade has been declared as 93.95m above sea level (ASL). The 30-storey tower planned for the project shown below, centered on top by a Mechanical Penthouse (MPH) of 6.25m height that is 9.636m north-south by 14.24m wide. The height will be 99.0m above grade to the parapet of the MPH, for a total height of 192.95m or 633’ ASL, as shown with diagram next page. A solid wall on the western side, 1m below the MPH, will separate the building from the adjacent one. A plan view of the MPH roof is shown second diagram next page.

15-17 Elm Architectural Sketch View from Northeast

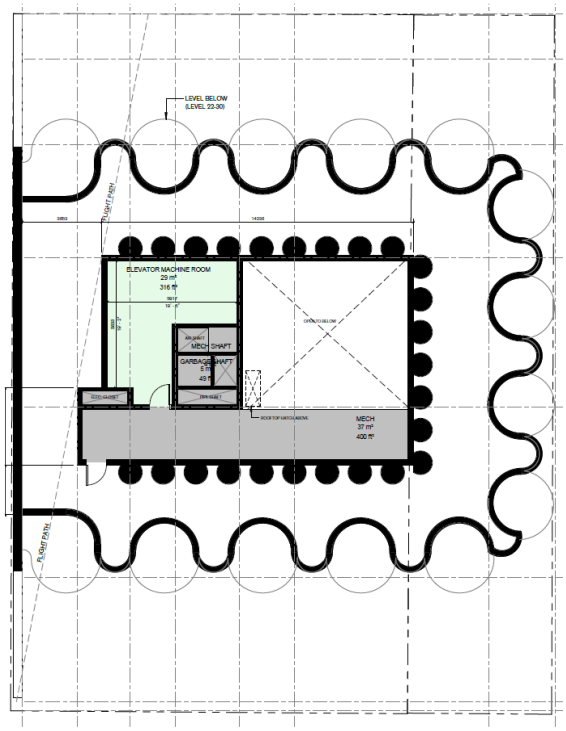


20 Edward Street and HSC Flight Paths. What can be observed with the diagram above is that there is high-rise structure already constructed at 20 Edward Street, immediately adjacent south of 15-17 Elm Street. Construction started in April 2019. The structure fully underlies the 2017 eastern flight path serving Sick Kids Heliport, under the second section which has a slope rising at 16%. The northwestern edge of the building is closest to the HSC Heliport at 416m to the centre of the pad. The Mechanical Penthouse roof atop the eastern portion at 198.34m underlies the 2017 flight path where it is just above 199m ASL, just clearing.

Profile View from North of MPH Top of 15-17 Elm Tower

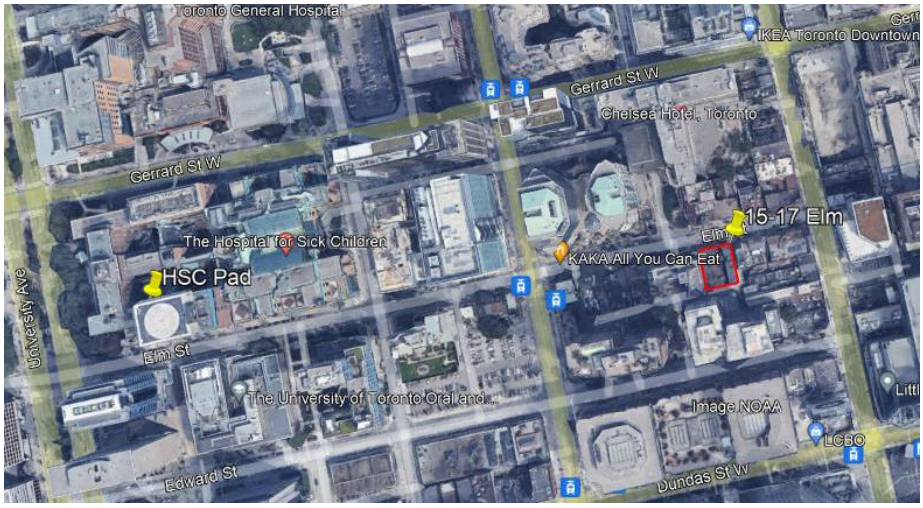


Plan View of Roof



SMH and HSC Helicopter Flight Paths. The flight paths that serve St. Mike's Hospital and Sick Kids heliports were protected by Municipal Zoning, as per Reference A. Obstacle Limitation Surfaces (OLS) of lateral and vertical dimensions are governed by Transport Canada regulations at Reference C, which cannot be penetrated by structures, cranes, persons, natural growth, or other objects. The project underlies the eastern flight path to Sick Kids Hospital, at 407.5m distance to centre of the helipad, shown next page.

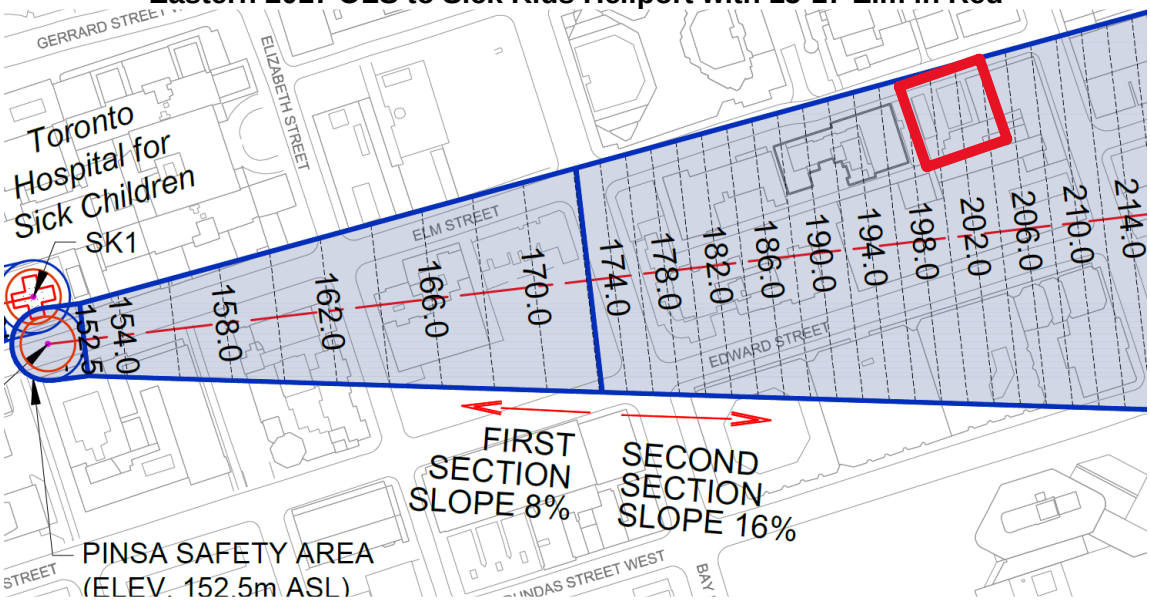
15-17 Elm in Red Relative to Sick Kids



Sick Kids Under 2017 Zoning. As illustrated below, the project at 15-17 Elm with MPH outlined in red, underlies the eastern flight path to the Hospital for Sick Children at 407.5m from centre of the pad to northwest corner of the MPH. OLS with 2017 Zoning features two Sections commencing at the radius of the Safety Area at 17.5m from centre of pad. The First Section rises at 8% slope to 245m distance, then Second Section rises at 16% slope for a further 830m length. The OLS under 2017 Zoning at point closest to the heliport is calculated at 195m ASL (152.2m pad + (245 x 8%) + (407.5m – 245m – 17.5) = 195m). The southeast corner farthest away had the OLS at 199.5m ASL. With the MPH parapet at 192.95m ASL, there would have been be 2.05m vertical clearance.

This meets the minimum clearance of 2-3m, established as the minimum vertical buffer to permit personnel and equipment for construction and maintenance. There will be insufficient vertical space to deploy a crane to construct the final floors and MPH. Mitigation may be to develop a detailed plan for manual construction of the uppermost structure.

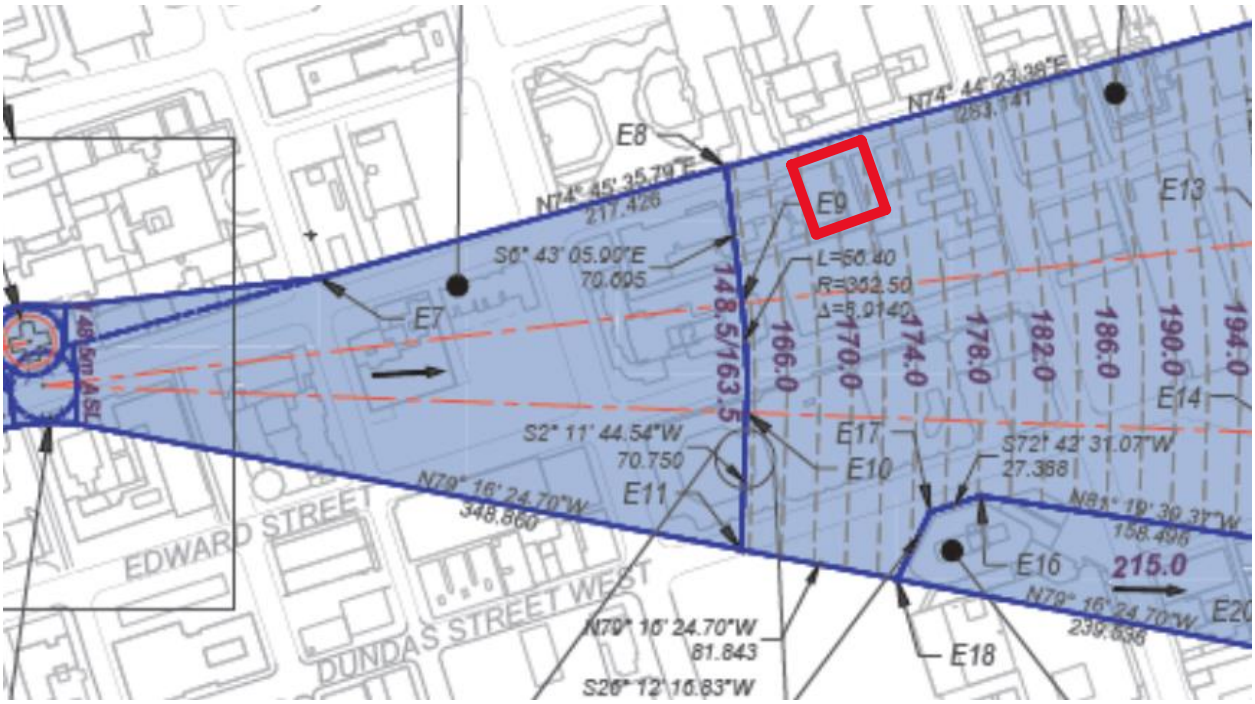
Eastern 2017 OLS to Sick Kids Heliport with 15-17 Elm in Red



Sick Kids Eastern Flight Path Under 2024 Zoning. The new eastern flight path to Sick KIds under the new 2024 Ontario MZO at Reference B features a First Section that is flat at 0% slope, at 248.5m ASL elevation, for 345m distance. The Second Section immediately rises 15m to 163.5m ASL, then rises at 12% to reach 197.1m ASL at 280m distance from start. The project at 15-17 Elm Street underlies this Second Section, where it is 168m-172m ASL, west to east.

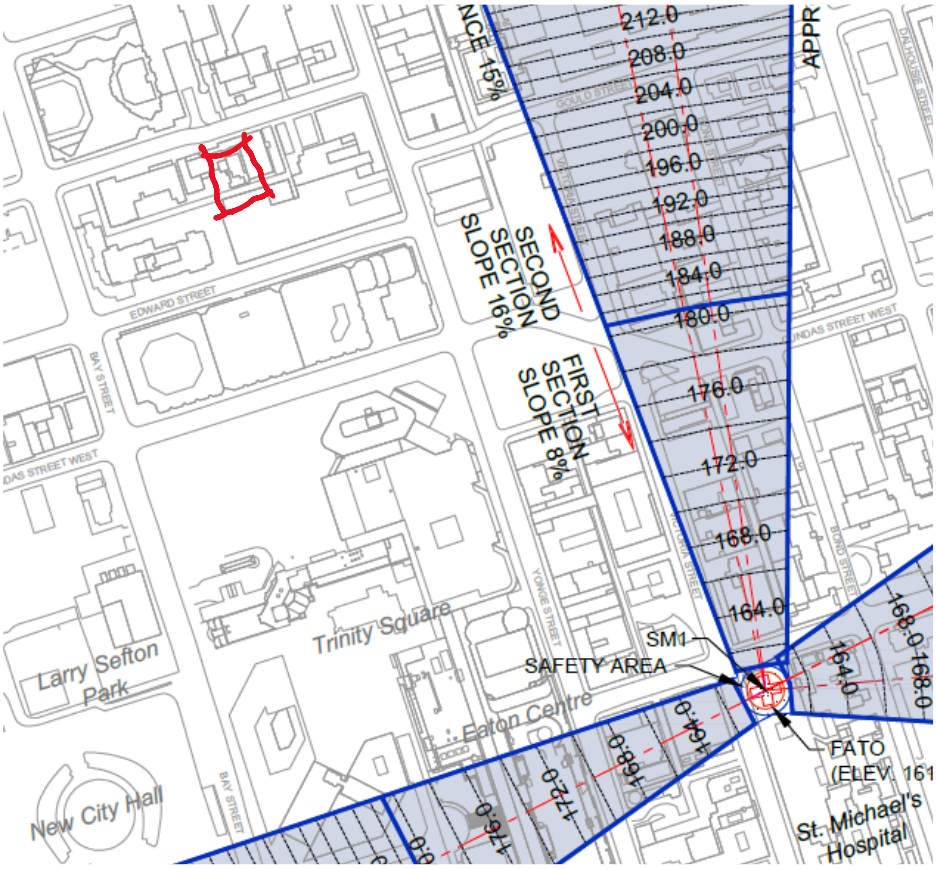
The 2017 Zoning has the OLS at 195m-199.5m, so under the new MZO the OLS will be reduced by 27m-27.5m. With rule-of-thumb of 3m/floor plus 3m buffer, this represents a 10-storey reduction in building height.

Eastern 2024 MZO OLS to Sick Kids Heliport with MPH in Red



St. Mike's. The diagram next page shows 15-17 Elm Street outlined in red, relative to the northern flight path from 2017 serving St. Michael's Hospital. The closest is the northern OLS, which is 160m east of the project and laterally clear. The western flight path OLS is 417m south of the property, and well clear laterally. These flight paths will not affect the project. Since the lateral dimensions under both the 2017 Zoning By-law and the 2024 MZO remain the same, the project will remain laterally clear and unaffected by St. Mike's OLS.

St. Mike's Flight Paths Relative to 15-17 Elm Street in Red



Crane Plan. A plan for crane(s) has not been developed, but with only 2m of vertical clearance with the current building plan, the crane will be a challenge. A flat crane will likely be required, and since it cannot penetrate the OLS, it must be limited to below the roof height. Manual construction techniques will be developed to build the uppermost structure and MPH.

Obstruction Lighting. To meet Transport Canada 621 standards, and due to the close proximity to the heliport, obstacle lighting may be needed on the tower and on the crane. Transport Canada may specify no lighting required because of shadowing by other adjacent lighted buildings. If determined they are required, CL864 red lights are recommended on the 4 roof corners, and on the tower and boom tip of the crane.

Discussion Points. There are observations and points for discussion on this matter:

- There was no consultation with stakeholders regarding this new MZO Zoning issued January 26, 2024. Over many years I have provided aeronautical advice to numerous developers and neither they nor myself were consulted on the new parameters which have significant effects. In many cases, there has been significant investments and time expended in project plans that must be altered, and viability becomes questionable.
- The previous 2017 Zoning defined the flight paths Obstacle Limitation Surfaces, and there were no apparent complaints or objections by the Hospitals nor ORNGE, as long as these were respected. These flight paths have been acceptable since 2017 and before.

- Apparently, there have been concerns expressed by ORNGE pilots with proximity of new cranes, but no data is available on such complaints. All my clients developed detailed crane plans, shared with the hospital consultants, prior to approval of crane permits.
- The 2017 Zoning parameters can be related to the specifications in Canadian Aviation Regulations 304 and Standards 325, particularly the standard lateral dimensions and slopes of the two sections which were applied to all flight paths serving both hospitals. The new 2024 MZO specifications with multiple sections, with variable slopes or flat, which have no apparent regulatory reference.
- What is the justification to have the Sick Kids 2024 Eastern flight path already compromised by the tower at 20 Edward Street? A helicopter respecting 20 Edward would also safely mitigate 15-17 Elm.

The two images below and next page illustrate two scenarios:

- the Sick Kids eastern flight path under the 2017 MZO, with 15-17 Elm clearing the OLS along with numerous other proposed projects.
- the eastern flight path under the 2024 MZO, with 15-17 Elm penetrating along with numerous other towers.

2017 MZO – OLS Clearing 15-17 Elm Project Outlined in Black

2024 MZO – OLS Penetrated by 15-17 Elm Project Outlined in Black

Conclusions. The current plan for the project at 15-17 Elm Street is for a 30-storey tower with the parapet of the MPH at 192.95m ASL. Hospital helicopter flight paths were examined:

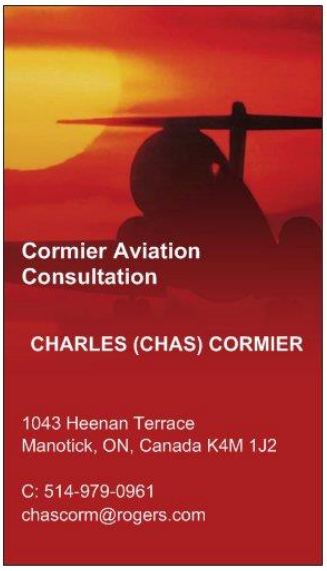
- The project underlies the eastern flight path serving the Hospital for Sick Children as specified under the 2017 By-Law. There is 2.05m clearance at the northwest corner of the MPH, the closest point to the helipad.
- The project underlies the eastern flight path serving the Hospital for Sick Children as specified under the new 2024 MZO, but will penetrate the OLS by 27m. The project must be reduced in height by some 10-storeys.
- The northern flight path to St. Mike's will be 160m east of the project, and the western flight path OLS is 417m south of the property, both well clear laterally under both MZO's.
- Crane plans will be a challenge, and manual techniques will be necessary to construct the uppermost structures.

Further clarifications can be provided on request.

Yours truly,

Charles (Chas) Cormier
Cell: 514-979-0961
Email: chascorm@rogers.com

Charles Cormier, has over 50 years aviation experience as a pilot in the Canadian Air Force, with Transport Canada, NAV CANADA, and private industry, with over 7000 hours flight time. He retired from the military in 1991 after active duty as a Sea King helicopter pilot in the Gulf War, attaining Lieutenant-Colonel rank. As an aeronautical information specialist formerly with NAV CANADA, MDA Aviation, and IDSNA, he has designed or conducted full quality review of over 2000 instrument flight procedures published in Canada, Myanmar, Ecuador and elsewhere. He has performed numerous flight checks, and can advise on aerodrome standards and automated weather observation systems (AWOS). As Chief Technical Director with IDS North America based in Montreal 2008-2011, he supervised 18 staff to redesign some 1000 instrument procedures per year with advanced computer design tools, under contract with NAV CANADA. Recently Cormier has assisted numerous building developers in Toronto to coordinate aviation constraints with hospital heliports and airports, and with wind turbine projects to resolve aeronautical conflicts. He currently maintains published flight procedures at 65+ airports across Canada. Twice elected a City Councillor in Dieppe, NB, 2001-2008. For 13 years he was a Director of the Foundation of the Royal Military College Saint-Jean, and sat 5 years on the College Board of Governors.



Charles (Chas) Cormier
Aviation Consultant
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Manotick, ON K4M 1J2

September 25, 2024

Ingrid Beausoleil, Vice President, Development Planning
KingSett Capital
40 King Street West
Toronto, ON M5H 3Y2

HOSPITAL FLIGHT PATHS – PROJECT AT 595 BAY STREET, TORONTO

Ref: A. Hospital Heliport Zoning Regulations By-law 1432-2017
B. Ont Reg 10/24 MZO Map 345 Hospital for Sick Children issued January 26, 2024
C. Transport Canada - Canadian Aviation Regulations – Heliport Standards CARs 325
D. KingSett Capital 2023-03-31 Site Study - Atrium on Bay

This is an updated analysis of a proposed high-rise 5-Tower building project at 595 Bay Street in Toronto, as related to the flight paths to Sick Kids and St. Michael's Hospitals, that were governed by the 2017 Toronto By-Law at Reference A which met technical regulations specified at Reference C. This analysis will review the changes and limitations resulting from new Ministerial Zoning Order, Ont Reg 10/24 at Reference B issued this last January. Ultimately, I conclude that Ministerial Zoning Order, Ont Reg 10/24 imposes significant new constraints on the proposed project without sufficient technical justification or rationale for the expanded flight path protections

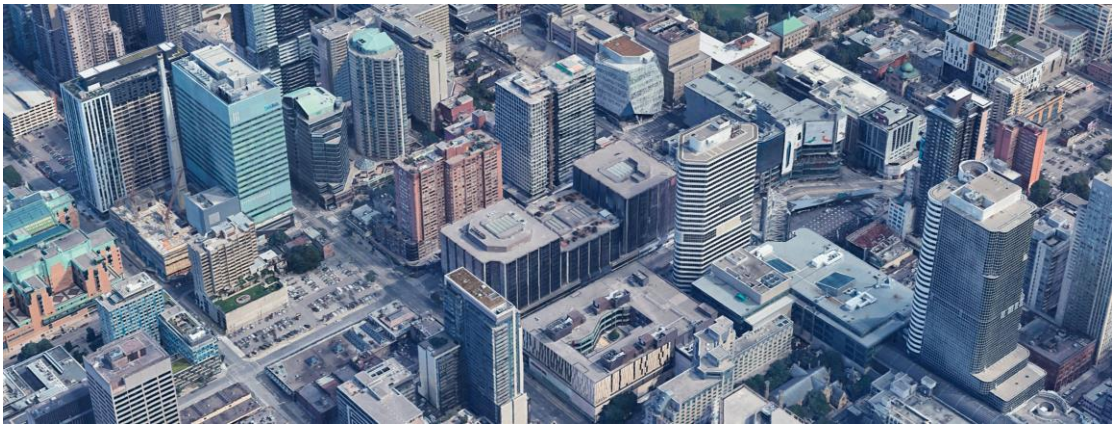
Background. As a consultant in aeronautical information services, in recent years I have provided services to numerous airports and to developers, with concerns for buildings, antennae, or wind turbines proposed in vicinity of aviation facilities. Most notably in Ontario, I have assisted the airports at Collingwood, Chatham-Kent, Toronto/Downsview, Kincardine, and Billy Bishop Toronto City. As well, I have provided advice to some 50 developers in Toronto regarding possible effects to the heliports atop St. Michael's Hospital (SMH) and the Hospital for Sick Children (HSC), and to the airports in the vicinity. The results were that some projects were found to have no detrimental effects to the airports, while others where there could be effects, building plans were altered or flight procedures were modified, to preserve accessibility to the airport. The purpose of my work was always to preserve safe and full access to airports, while permitting new structures to be erected as close and as high as the regulations permit.

Planning Comments. The City of Toronto states “In order to confirm there are no issues with the flight path, provide an aeronautical assessment to confirm there are no intrusions. This assessment should include a qualitative analysis and confirmation that there are no maintenance or projection issues associated with the development and that construction methods have been considered. As such, the assessment must also review the draft bylaw and specifically any referenced projections”.

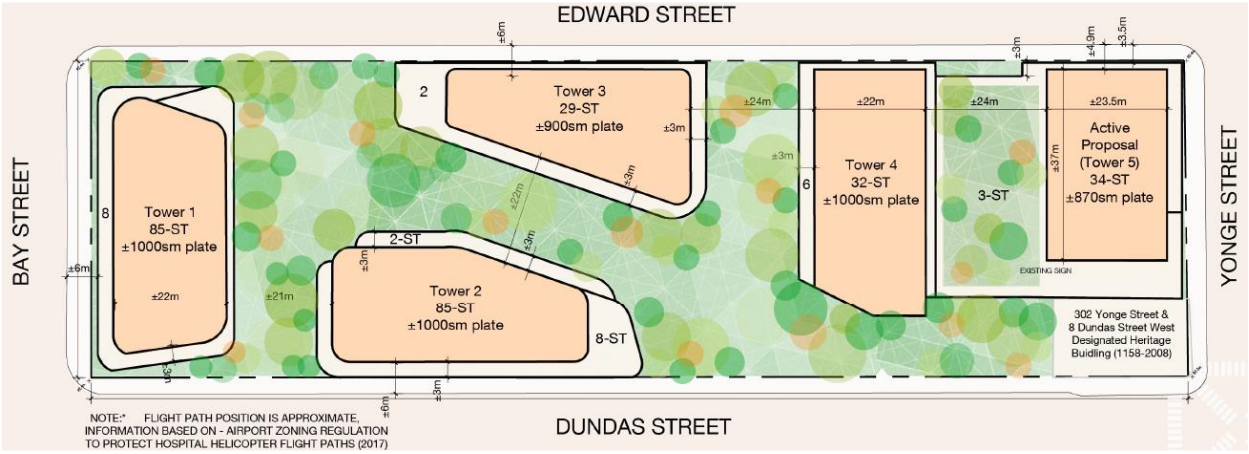
Project at 595 Bay Street. The property at 595 Bay is contained within Edward Street to the north, Yonge Street to the east, Dundas Street to the south, and Bay Street to the west. There are five towers planned, with 33-storey Tower 5 to occupy the eastern end of the property, Tower 1 is at west end, Tower 2 at mid-south, Tower 3 at mid-north, and Tower 4 east of midway. The footprint of the project is approximately 61.5m north-south by 213.2m wide, and grade is indicated as 92.14m above sea level (ASL) in Datum CGVD2013. Conceptual views are depicted below, and a plan view is shown next page.

595 Bay Street Architectural Sketch View from Northeast

595 Bay Street Aerial View from Southwest



Plan View of Project Towers



With average grade of 92.14m ASL, Tower elevations are:

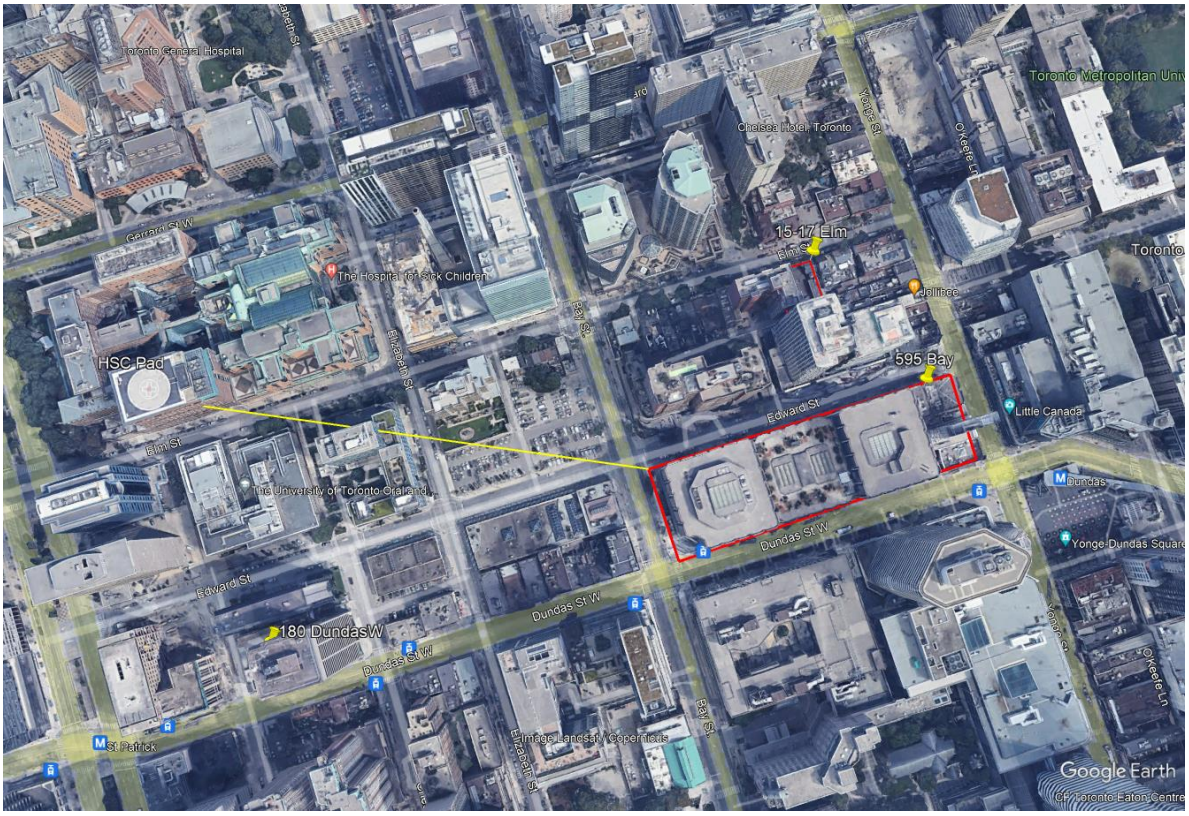
- Tower 1 – 85-storeys, 265m above grade, 357.14m or 1172’ ASL
- Tower 2 – 85-storeys, 265m above grade, 357.14m or 1172’ ASL
- Tower 3 – 29-storeys, 93m above grade, 185.14m or 607’ ASL
- Tower 4 – 32-storeys, 106m above grade, 198.14m or 650’ ASL
- Tower 5 – 34-storeys, 113.9m above grade, 206.04m or 676’ ASL.

HSC Helicopter Flight Paths. The flight paths that serve St. Mike’s Hospital and Sick Kids heliports were protected by Municipal Zoning issued in 2017, as per Reference A. Obstacle Limitation Surfaces (OLS) of lateral and vertical dimensions were governed by Transport Canada regulations at Reference C, which could not be penetrated by structures, cranes, persons, natural growth, or other objects. The flight path OLS essentially commenced at the edge of the safety area, at half width each side of track, splaying outward 15%, rising at 8% for first section of 245m, then 16% for a further second section of 830m.

A new Ministerial Zoning Order was issued in January 2024 as per Reference B, with different lateral and vertical dimensions, and divided into up to 5 sections, with slopes varying from zero, 5%, 12% and 16%. Sick Kids flight paths widened from single degree tracks both directions, to 4° degrees west and 8.91° east. No regulatory reference was found to guide these dimensions.

The project at 595 Bay, shown next page, underlies the eastern flight path to Sick Kids Hospital, at 312m distance southeast from centre of the helipad to the northwest corner of the property, closest. The farthest point of the project property is the southeast corner, 531m away.

595 Bay Street in Red Relative to Sick Kids Heliport

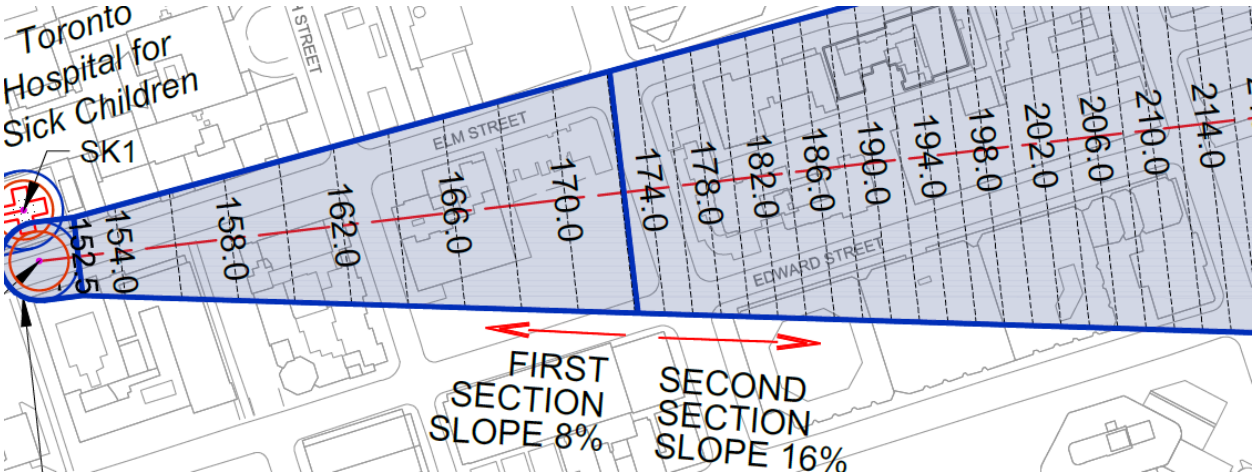


Sick Kids under 2017 Zoning. The eastern flight path to the Hospital for Sick Children as established by the 2017 Zoning as per Reference A, is illustrated on next page. It is observed that:

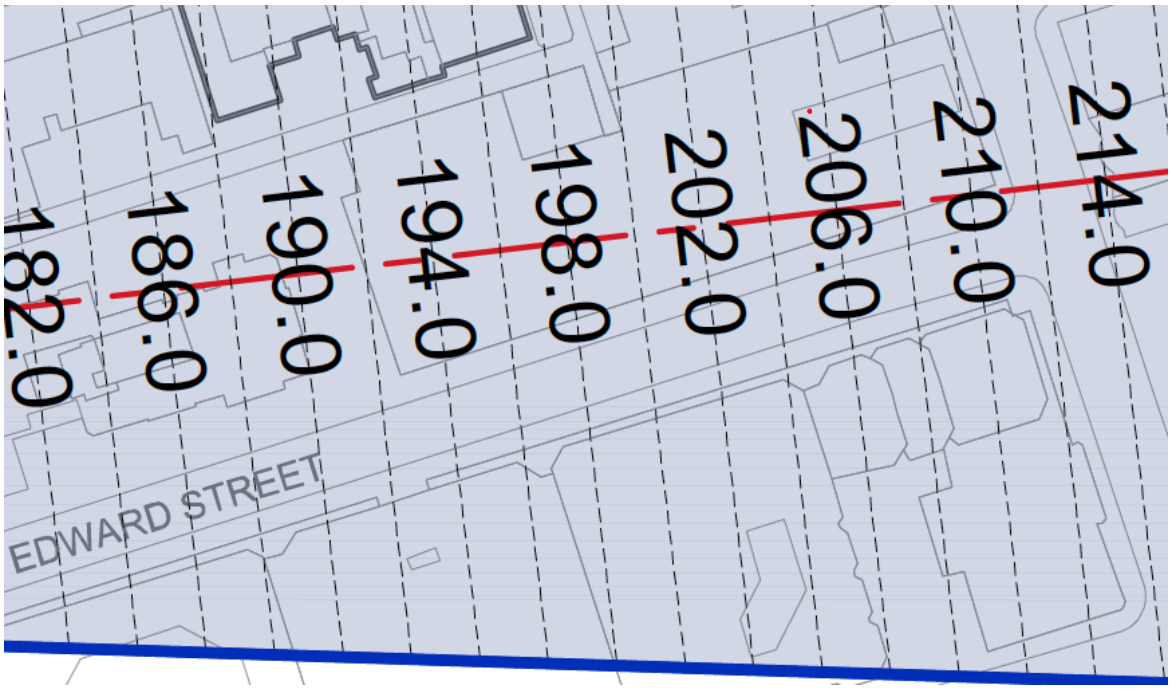
- Towers 1 and 2 are laterally clear south of the flight path OLS. Their heights would not be limited, so 85 storeys is feasible.
- Tower 3 underlies the OLS from 188m ASL at western edge to 198m at the eastern edge. With planned height of 185.14m ASL, there will be a vertical clearance of at least 2.86m rising to 12.86m, west to east.
- Tower 4 will underlie the OLS where it is 201m to 206m ASL, west to east. With planned height of 198.14m there will be no penetration, and clearance by at least 3m will be achievable.
- Tower 5 will underlie 208m to 212m ASL of 2017 MZO eastern flight path OLS. At planned height of 206m, the will be no pentration and 2m to 6m vertical clearance, west to east.

While not specified in the By-Law this meets the minimum clearance of 2-3m, established as the minimum vertical buffer to permit personnel and equipment for construction and maintenance. There may be insufficient vertical space to deploy a crane to construct the final floors and MPH. However, this is a common buffer height and mitigation may be effectively develop a detailed plan for manual construction of the uppermost structure.

Eastern OLS to Sick Kids Heliport under 2017 Zoning

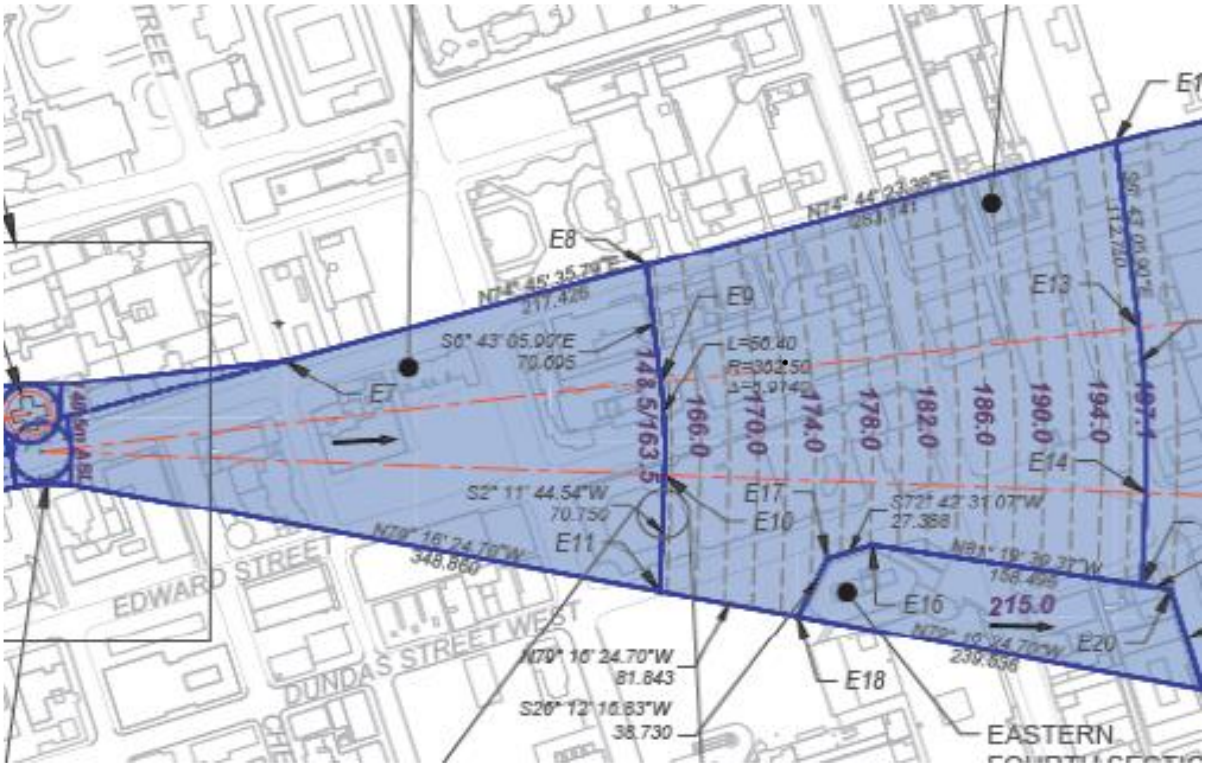


Close-up of Eastern OLS to Sick Kids Heliport under 2017 Zoning



Sick Kids Eastern Flight Path Under 2024 Zoning. The new eastern flight path to Sick KIds under the 2024 Ontario MZO features a First Section that is flat at 0% slope, at 248.5m ASL elevation, for 345m distance. Curiously, this surface is 3m below the FATO elevation. The start of Second Section immediately rises 15m to 163.5m ASL, then rises at 12% until well past the eastern edge of the 595 Bay project.

Eastern OLS to Sick Kids Heliport under 2024 MZO



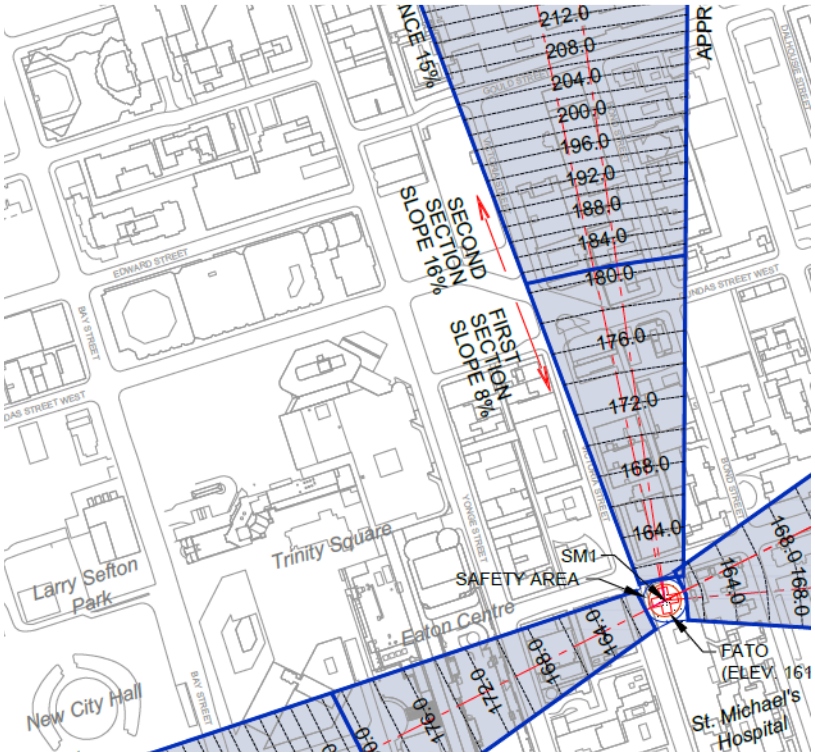
Close-up of Eastern OLS to Sick Kids Heliport under 2024 MZO

The allowable heights for the towers, and number of floors, under the 2024 MZO are:

- Tower 1 underlies the Eastern First Section, which has OLS flat height of 148.5m ASL. This will reduce the planned height of 357.14m by 209m, plus an additional 3m or 1 storey for maintenance, representing loss of 70 storeys from the planned 85 storeys;
- Tower 2 underlies the Eastern Second Section, where the OLS height is 165m to 172m ASL. This will reduce the planned height of 357.14m by 192m, plus 3m, representing loss of 65 storeys from the planned 85 storeys;
- Tower 3 underlies the Eastern Second Section, whre the OLS height is 165m to 172m ASL. This will reduce the planned height of 185.14m by 20m, plus 3m, representing loss of 8 storeys from the planned 29 storeys;
- Tower 4 will underlie the Eastern Second Section OLS where it is 173m to 177m ASL, west to east. With planned height of 198.14m, there will be a reduction of 26m plus 3m, representing loss of 10 storeys from the planned 32 storeys; and,
- Tower 5 will underlie 178m to 182m ASL OLS. With planned height of 206m, there will be 28m of penetration plus 3m, representing loss of 10 storeys from the planned 34 storeys.

St-Mike's. The diagram below shows the flight paths serving St. Michael's Hospital. The closest is the northern OLS, which is 114m east of the project and laterally clear. The western flight path OLS is 288m south of the property, and well clear laterally. The flight paths serving St-Mike's under both the 2017 Zoning By-law and the 2024 MZO have the same lateral dimensions, so will clear the property and not affect the project.

St. Mike's Flight Paths Relative to 595 Bay Street



Crane Plan. A plan for crane(s) has not been developed, but with the current plan penetrating the OLS of the 2024 MZO, the cranes will be a challenge. A flat crane will likely be required, and since it cannot penetrate the OLS, it must be limited to below the roof height. Manual construction techniques will be developed to build the uppermost structure and MPH.

Obstruction Lighting. To meet Transport Canada 621 standards, and due to the close proximity to the heliport, obstacle lighting may be needed on the tower and on the crane. Transport Canada may specify no lighting required because of shadowing by other adjacent lighted buildings. If determined they are required, CL810 red lights are recommended on the 4 roof corners, and on the tower and boom tip of the crane.

Discussion Points. There are observations and points for discussion on this matter of Hospital Helicopter Flight Paths in downtown Toronto:

- There was no consultation with stakeholders regarding this new MZO Zoning issued January 26, 2024. Over many years I have provided aeronautical advice to numerous developers and neither they nor myself were consulted prior on the new parameters which have significant effects. In many cases, there has been significant investments and time expended in project plans that must be altered, and viability becomes questionable.
- The previous 2017 Zoning defined the flight paths Obstacle Limitation Surfaces, and there were no apparent complaints or objections by the Hospitals nor ORNGE, as long as these were respected. These flight paths have been acceptable since 2017 and before.
- Apparently, there have been concerns expressed by ORNGE pilots with proximity of new cranes, but no data is available on such complaints. All my clients developed detailed crane plans, shared with the hospital consultants, prior to approval of crane permits.
- The 2017 Zoning parameters can be related to the specifications in Canadian Aviation Regulations 304 and Standards 325, particularly the standard lateral dimensions and slopes of the two sections which were applied to all flight paths serving both hospitals. The new 2024 MZO specifications with multiple sections, with variable slopes or flat, seem to have no apparent regulatory reference.
- What is the justification to have the Sick Kids 2024 Eastern flight path already compromised by the tower at 20 Edward Street? A helicopter respecting 20 Edward would also safely mitigate the towers at 595 Bay Street.

The two images next page illustrate two scenarios:

- the Sick Kids eastern flight path under the 2017 MZO, with 595 Bay clearing the OLS along with numerous other proposed projects.
- the eastern flight path under the 2024 MZO, with 595 Bay penetrating along with numerous other towers.

2017 MZO – OLS Clearing 595 Bay Project Outlined in Black

2024 MZO – OLS Penetrated by 595 Bay Project Outlined in Black

Conclusions. The current plan for the project at 595 Bay Street is for five Towers ranging from 29 to 85 storeys. Hospital helicopter flight paths under 2017 and 2024 Zoning were examined:

- The project underlies the 2017 MZO eastern flight path serving the Hospital for Sick Children. Towers 1 and 2 are laterally clear and not limited, so 85 storeys is permitted. Towers 3 to 5 are below the OLS and feasible for 29, 32, and 34 storeys.

- Under the new 2024 MZO, the eastern flight path for Sick Kids has OLS height considerably lower and wider. Reductions of planned towers would be 70-storeys for Tower 1, 65-storeys for Tower 2, 8-storeys for Tower 3, and 10-storeys for Towers 4 & 5.

- The northern flight path to St. Mike's will be 114m east of the project, and the western flight path OLS is 288m south of the property, both well clear laterally.

- Crane plans will be a challenge, and manual techniques may be necessary to construct the uppermost structures.

Further clarifications can be provided on request.

Yours truly,

Charles (Chas) Cormier
Cell: 514-979-0961
Email: chascorm@rogers.com

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Attachment B

Additional Information from City of Toronto or Applicant

1. Tower Crane LR 273 Site Interaction Placement Section dated February 7, 2023
2. Proposed Draft ZBA – 438-86_595Bay_Street

DISCLAIMER:

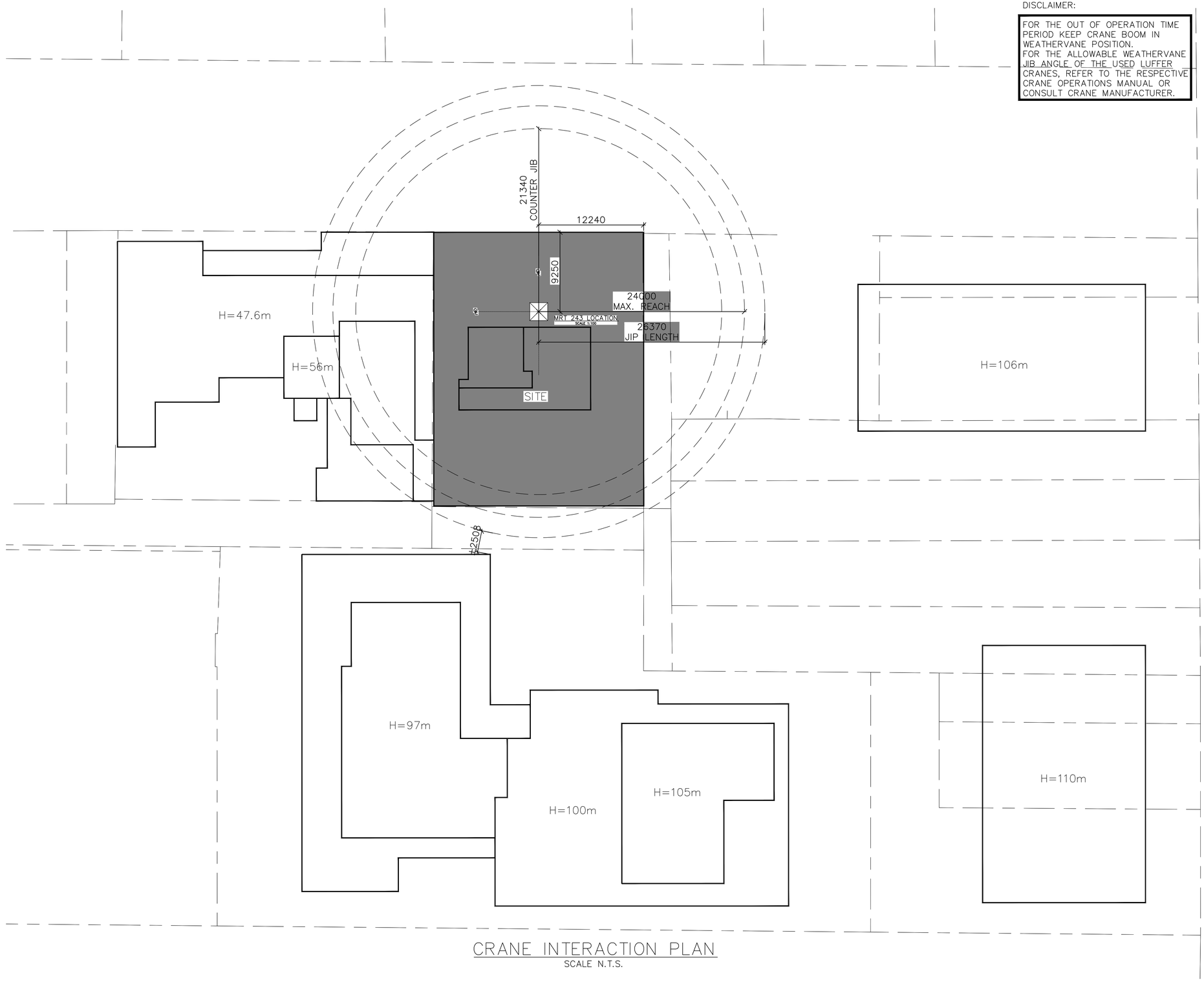
FOR THE OUT OF OPERATION TIME PERIOD KEEP CRANE BOOM IN WEATHERVANE POSITION.
FOR THE ALLOWABLE WEATHERVANE JIB ANGLE OF THE USED LUFFER CRANES, REFER TO THE RESPECTIVE CRANE OPERATIONS MANUAL OR CONSULT CRANE MANUFACTURER.

DISCLAIMER:

FOR MULTIPLE CRANE SITES REFER TO CODE FOR TOWER CRANES CANCSA-Z248-17, SECTION 8.10.2

NOTE:

ALL CLEARANCES SHOWN ON THIS DRAWING MUST BE VERIFIED BY THE CONTRACTOR ON SITE.



CRANE INTERACTION PLAN
SCALE N.T.S.

REV. NO.	DESCRIPTION	DATE	BY	APPD.

IMPORTANT

- ☒ PRELIMINARY : NOT TO BE USED FOR CONSTRUCTION OR FABRICATION.
- ☐ APPROVED : FOR CONSTRUCTION OR FABRICATION.
- ☐ FINAL : SUBJECT TO LOCAL APPROVAL.
- ☐ REVISED : DESTROY ALL PREVIOUS COPIES.

APPROVED

DATE _____

CLIENT
APPLEWOOD FORMING INC.
160 APPLEWOOD CRES.
CONCORD, ONT. L4K 4H2

PROJECT
15-17 ELM ST.
TORONTO, ONTARIO

TITLE
TOWER CRANES
SITE INTERACTION
PLACEMENT PLAN

SCALE	DATE
AS NOTED	FEB 07 2023
DRAWN: J.LEE	CHECKED

McINTOSH PERRY
6240 HIGHWAY 7 SUITE 200 WOODBRIDGE ON L4H 4G3
Tel: 905.856.5200 Fax: 905.695.0221
Toll Free: 1.888.348.8991 www.mcintoshperry.com

DRAWING NUMBER 4-G-233773-INT1 REV. 0

DISCLAIMER:

FOR THE OUT OF OPERATION TIME PERIOD KEEP CRANE BOOM IN WEATHERVANE POSITION.
FOR THE ALLOWABLE WEATHERVANE JIB ANGLE OF THE USED LUFFER CRANES, REFER TO THE RESPECTIVE CRANE OPERATIONS MANUAL OR CONSULT CRANE MANUFACTURER.

DISCLAIMER:

FOR MULTIPLE CRANE SITES REFER TO CODE FOR TOWER CRANES CANCSA–Z248–17, SECTION 8.10.2

NOTE:

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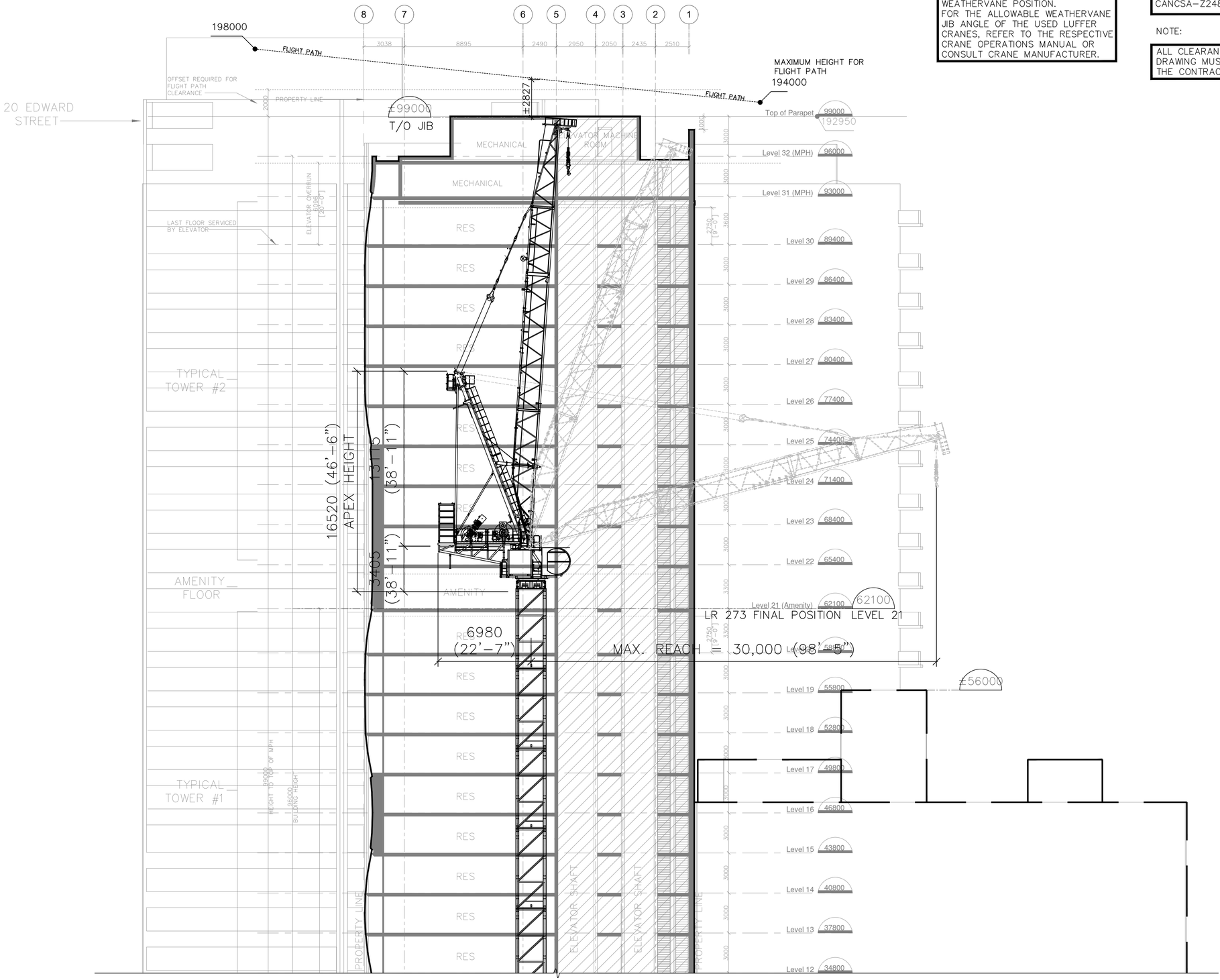

LR 273 ELEVATION VIEW
SCALE N.T.S.

REV. NO.	DESCRIPTION	DATE	BY	APPD.

IMPORTANT

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- ☐ REVISED : DESTROY ALL PREVIOUS COPIES.

APPROVED

DATE

CLIENT
APPLEWOOD FORMING INC.
160 APPLEWOOD CRES.
CONCORD, ONT. L4K 4H2

PROJECT
15–17 ELM ST.
TORONTO, ONTARIO

TITLE
TOWER CRANE LR 273
SITE INTERACTION
PLACEMENT SECTION

SCALE	DATE
AS NOTED	FEB 07 2023
DRAWN: J.LEE	CHECKED

McINTOSH PERRY
6240 HIGHWAY 7 SUITE 200 WOODBRIDGE ON L4H 4G3
Tel: 905.856.5200 Fax: 905.695.0221
Toll Free: 1.888.348.8991 www.mcintoshperry.com

DRAWING NUMBER 4–G–233773–INT2 REV. 0

DISCLAIMER:

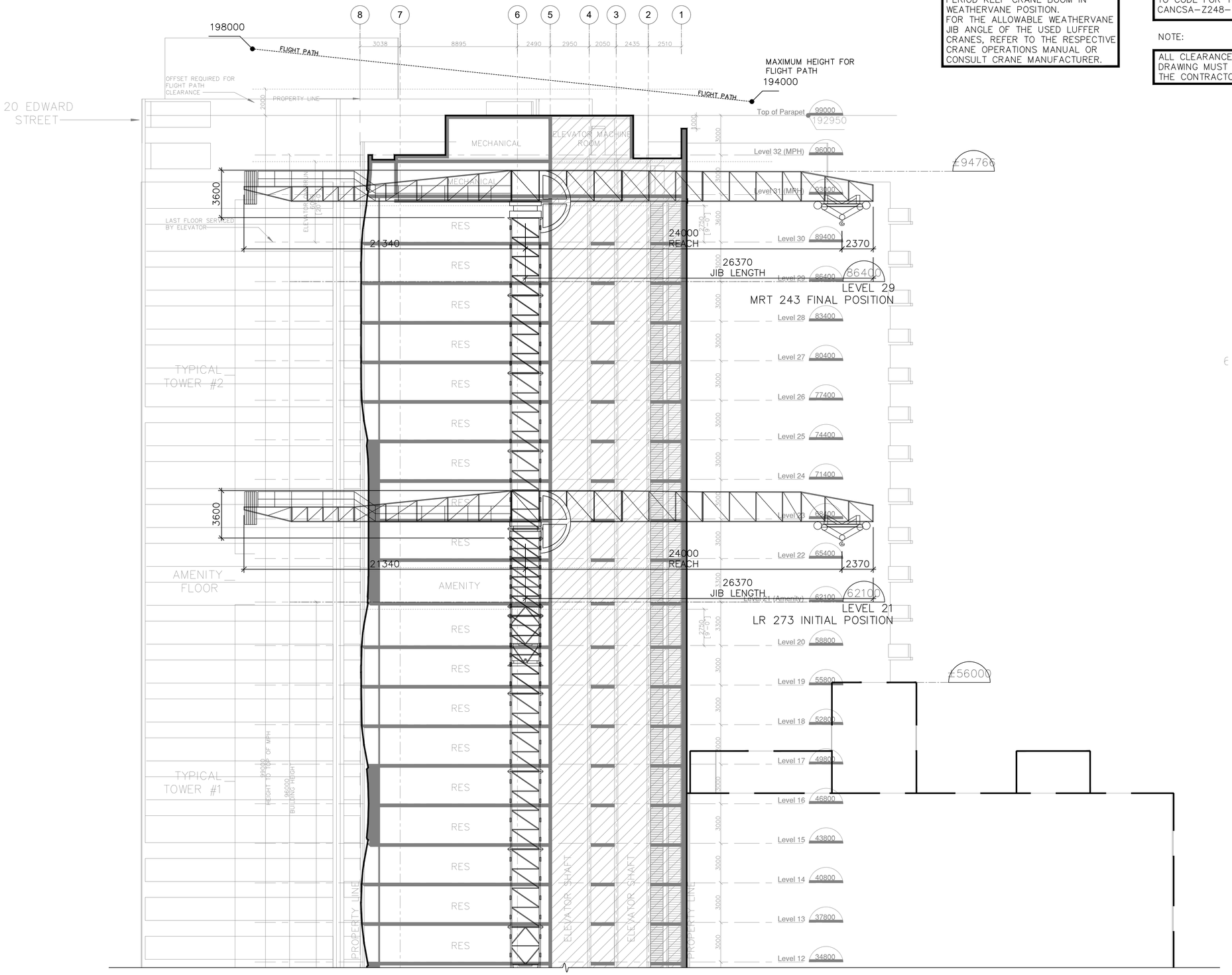
FOR THE OUT OF OPERATION TIME PERIOD KEEP CRANE BOOM IN WEATHERVANE POSITION.
FOR THE ALLOWABLE WEATHERVANE JIB ANGLE OF THE USED LUFFER CRANES, REFER TO THE RESPECTIVE CRANE OPERATIONS MANUAL OR CONSULT CRANE MANUFACTURER.

DISCLAIMER:

FOR MULTIPLE CRANE SITES REFER TO CODE FOR TOWER CRANES CANCSA–Z248–17, SECTION 8.10.2

NOTE:

ALL CLEARANCES SHOWN ON THIS DRAWING MUST BE VERIFIED BY THE CONTRACTOR ON SITE.



MRT 243 ELEVATION VIEW
SCALE N.T.S.

REV. NO.	DESCRIPTION	DATE	BY	APPD.

IMPORTANT

- ☒ PRELIMINARY : NOT TO BE USED FOR CONSTRUCTION OR FABRICATION.
- ☐ APPROVED : FOR CONSTRUCTION OR FABRICATION.
- ☐ FINAL : SUBJECT TO LOCAL APPROVAL.
- ☐ REVISED : DESTROY ALL PREVIOUS COPIES.

APPROVED

DATE

CLIENT
APPLEWOOD FORMING INC.
160 APPLEWOOD CRES.
CONCORD, ONT. L4K 4H2

PROJECT
15–17 ELM ST.
TORONTO, ONTARIO

TITLE
TOWER CRANE MRT 243
SITE INTERACTION
PLACEMENT SECTION

SCALE	DATE
AS NOTED	FEB 07 2023
DRAWN: J.LEE	CHECKED

McINTOSH PERRY
6240 HIGHWAY 7 SUITE 200 WOODBRIDGE ON L4H 4G3
Tel: 905.856.5200 Fax: 905.695.0221
Toll Free: 1.888.348.8991 www.mcintoshperry.com

DRAWING NUMBER 4–G–233773–INT3 REV. 0

CITY OF TORONTO

BY-LAW No. XXXX-2023

To amend former City of Toronto Zoning By-law No. 438-86, as amended, with respect to lands municipally known as 595 Bay Street, 14-40 Dundas Street West and 304-316 Yonge Street.

Whereas authority is given to Council of the City of Toronto by Section 34 of the *Planning Act*, R.S.O. 1990, c. P.13, as amended, to pass this By-law; and

Whereas Council of the City of Toronto has provided adequate information to the public and has held at least one public meeting in accordance with the *Planning Act* regarding the proposed Zoning By-law amendment;

The Council of the City of Toronto enacts:

1. None of the provisions of Section 2(1) with respect to the definition of *grade, height* and *lot* and Sections 4(2)(a); 4(5)(b); 4(8)(b); 4(13)(a); 4(17); 8(3)Part I 1 and 2; 8(3) Part III 1; 8(3) Part XI 2; 12(2)132; 12(2)208; and 12(2)260; of *By-law No. 438-86 as amended*, and By-law No. 522-79, as amended by By-law Nos. 43-79, 428-82, 636-82, 715-82 and 1997-0194, shall apply to prevent the erection, enlargement and use of a *mixed use building* and *accessory* uses thereto including a *parking garage* on the *lot*, provided that all of the provisions of this By-law are complied with:

(a) the *lot* comprises the lands delineated by heavy lines on Map 1, attached to and forming part of this By-law;

(b) the total aggregate *non-residential gross floor area* erected on the *lot* shall not exceed 133,600 square metres;

(c) the total aggregate *residential gross floor area* erected on the *lot* shall not exceed 22,500 square metres;

(d) no above *grade* portion of a building or structure on the *lot* shall be located other than wholly within the areas delineated by heavy lines on the attached Map 2 and Map 2A, except for the following:

(i) awnings, balustrades, canopies, cornices, eaves, fences, guardrails, landscape features including planters, lighting fixtures, media tower, ornamental elements, parapets, railings, safety railings, screens, stairs, stair enclosures, underground garage ramps and their associated structures including retaining walls and curbs, vents, wheelchair ramps and window sills.

(e) the *height* of any building or structure, or portion thereof, shall not exceed the *heights* indicated by the numbers following the symbol H on the attached Map 2 and Map 2A of this By-law, with the exception of the following elements which may project above the *height* limits:

(i) Mechanical penthouse and mechanical elements up to a maximum height of 6.0 metres;

(ii) structures on any roof used for outside or open air recreation, maintenance, safety, or wind protection purposes, green roofs, parapets, guardrails, screens, and window washing equipment up to a maximum of 3.0 metres

(iii) awnings, balustrades, canopies, cornices, eaves, fences, landscape features including planters, lighting fixtures, ornamental elements, railings, skylights, stairs, stair enclosures, telecommunication equipment, underground garage ramps and their associated structures including retaining walls and curbs, vents, wheelchair ramps, and window sills up to a maximum of 3.0 metres; and

(iv) on the portion of the *lot* known municipally as 306 Yonge Street, a media tower with a maximum *height* the sum of 52.0 metres.

(f) *parking spaces* required by *By-law No. 438-86*, or By-law No. 522-79, both as amended or varied *shall* be provided and maintained in a *public garage, a private commercial garage, a private parking garage* or a *parking station,* any and all of which shall be located on the *lot* or within a 200 metres radius distance thereof, to the extent at least prescribed therein;

(g) the maximum number of vehicle *parking spaces* shall be 442;

(h) the minimum dimensions prescribed in Section 4(17) of 438-86 as amended with respect to the definition of a parking space shall apply only to the *parking spaces* constructed on the lot following the passing of this by-law.

(i) ingress and egress to and from the underground parking facility shall be provided by an unobstructed driveway or passageways providing access to a public highway and having a minimum width of 3.0 metres for one-way operations and a minimum width of 5.5 metres for two-way operation;

(j) A total of 3 loading spaces shall be provided for the existing non-residential uses on the lot as of November 5th, 2021. Further, a minimum 1 Type G loading space shall be provided for the residential uses on the lot. No additional loading spaces shall be provided for new retail uses on the lot.

Use	Range of *Total Floor Area (sq.m.)*	Number of Loading Spaces Required		
		Loading space Type B	*Loading space Type C*	*Loading Space Type G*
Office purposes, including Government Office; Clinic; Medical/Dental Office; Mixed Use Building	28,000-51,999 52,000-75,999 76,000-99,999 100,000-123,999 124,000-147,999	2 3 3 4 4	3 3 4 4 5	1

i) The Type G *Loading Space* to be provided in accordance with the minimum dimensional requirements of By-law 569-2013

ii) Loading spaces are required to be provided and maintained at *grade* on the *lot* and five shall have access directly from Edward Street;

(k) Despite (i) above, the loading space on the lot, existing as of the date of the passing of this By-law, that has dimensions that are lesser than the minimum required, such loading space is permitted and such loading space may satisfy the requirement of (i) above;

(l) Notwithstanding any provision of this By-law or By-law 438-86, as amended, the Existing Building may be occupied during construction of the Building Addition without the provision of required *parking spaces, loadings paces, bicycle parking spaces* and *landscaped open space.*

(m) a total of 383 *bicycle parking spaces* may be provided across all parking levels for residential occupants and will be maintained in accordance with the following minimum requirements:

(i) a minimum of 0.92 long-term *bicycle parking spaces* per dwelling unit
(ii) a minimum of 0.12 short-term *bicycle parking spaces* per dwelling unit

(n) a minimum of 1,555 square metres shall be provided as *common outdoor space* on the *lot* to support the enlargement and use of a *non-residential building*; and

(o) for clarity, indoor and outdoor public walkways which are directly accessible from the adjoining public sidewalks shall continue to be provided and maintained as required by By-law No. 522-79, as amended.

(p) For each car-share parking space provided on the lot, the minimum number of resident parking spaces required pursuant to subsection (g) above may be reduced by four parking spaces, up to a maximum reduction as calculated by the following formula: 4 x (the total number of dwelling units on the lot divided by 60), rounded down to the nearest whole number;

(q) For each five (5) bicycle parking spaces provided in excess of the minimum number of bicycle parking spaces required by this By-law, the minimum number of resident parking spaces required pursuant to subsection (g) above may be reduced by 1 parking space, up to a maximum reduction of 20% of the minimum that would otherwise be required pursuant to subsection (g) above;

2. Despite any existing or future consent, partition or division of the *lot*, the provisions of this By-law shall apply to the *lot* as if no consent, partition or division occurred.

3. For the purposes of this By-law, the terms set forth in italics shall have the same meaning as such terms have for the purposes of *By-law No. 438-86,* as amended, except that the following definitions shall apply:

(a) "*By-law No. 438-86*" means By-law No. 438-86, as amended titled "A By-law to regulate the use of land and the erection, use, bulk, height, spacing of and other matters relating to buildings and structures and to prohibit certain uses of lands and the erection and use of certain buildings and structures in various areas of the City of Toronto";

(b) "*grade"* means the Canadian Geodetic Datum elevation of 93.74 metres for additions of non-residential gross floor area and 92.69 for additions of residential gross floor area;

(c) "*height"* means the vertical distance between *grade* and the highest point of the building or structure;

(d) "*lot*" means the lands outlined by heavy lines on Map 1 attached to this By-law; and

(e) "*parking garage"* means a building or portion of a building, other than a *private garage* that is used for the temporary parking of motor vehicles.

(f) "*residential gross floor area*" shall mean the aggregate of the areas of each floor and the space occupied by walls and stairs, above and below grade, of the residential portion of a mixed-use building, measured between the exterior faces of the exterior walls of the building or structure, exclusive of the following areas:

(i) parking, loading and bicycle parking below-ground;
(ii) loading spaces at the ground level and bicycle parking spaces at or above-ground;

(iii) storage rooms, washrooms, electrical, utility, mechanical and ventilation rooms in the basement;
(iv) shower and change facilities required by this By-law for required bicycle parking spaces;
(v) amenity space;
(vi) elevator shafts;
(vii) garbage shafts;
(viii) mechanical penthouse; and
(ix) exit stairwells in the building.

(g) "*bicycle parking space*" means an area that is equipped with a bicycle rack, bicycle ring, bicycle stacker or bicycle locker for the purpose of parking and securing bicycles;
(i) where the bicycles are to be parked on a horizontal surface, has horizontal dimensions of at least 0.6 metres by 1.8 metres and vertical dimension of at least 1.9 metres; and
(ii) where the bicycles are to be parked in a vertical position, has horizontal dimensions of at least 0.6 metres by 1.2 metres and a vertical dimension of at least 1.9 metres;
(iii) notwithstanding (i) and (ii) above, where the bicycles are to be parking in a stacker, being a device that allows parking spaces to be positioned above or below one another with the aid of an elevating mechanism, the parking space within the stacker shall have horizontal dimensions of at least 1.8 metres by 0.6 metres, and the stacker shall be located in an area with a vertical dimension of at least 2.4 metres;

4. Except as provided herein, the provisions of *By-law No. 438-86*, as amended, and By-law No. 522-79, as amended, shall continue to apply to the *lot*.

5. By-law 1725-2013 is hereby repealed and replaced by By-law XXXX-2023 [Clerks to provide By-law ##]

6. Within the *lot*, no person shall use any land or erect or use any building or structure unless the following municipal services are provided to the *lot* line and the following provisions are complied with:

(a) all new public roads have been constructed to a minimum of base curb and base asphalt and are connected to an existing public highway; and

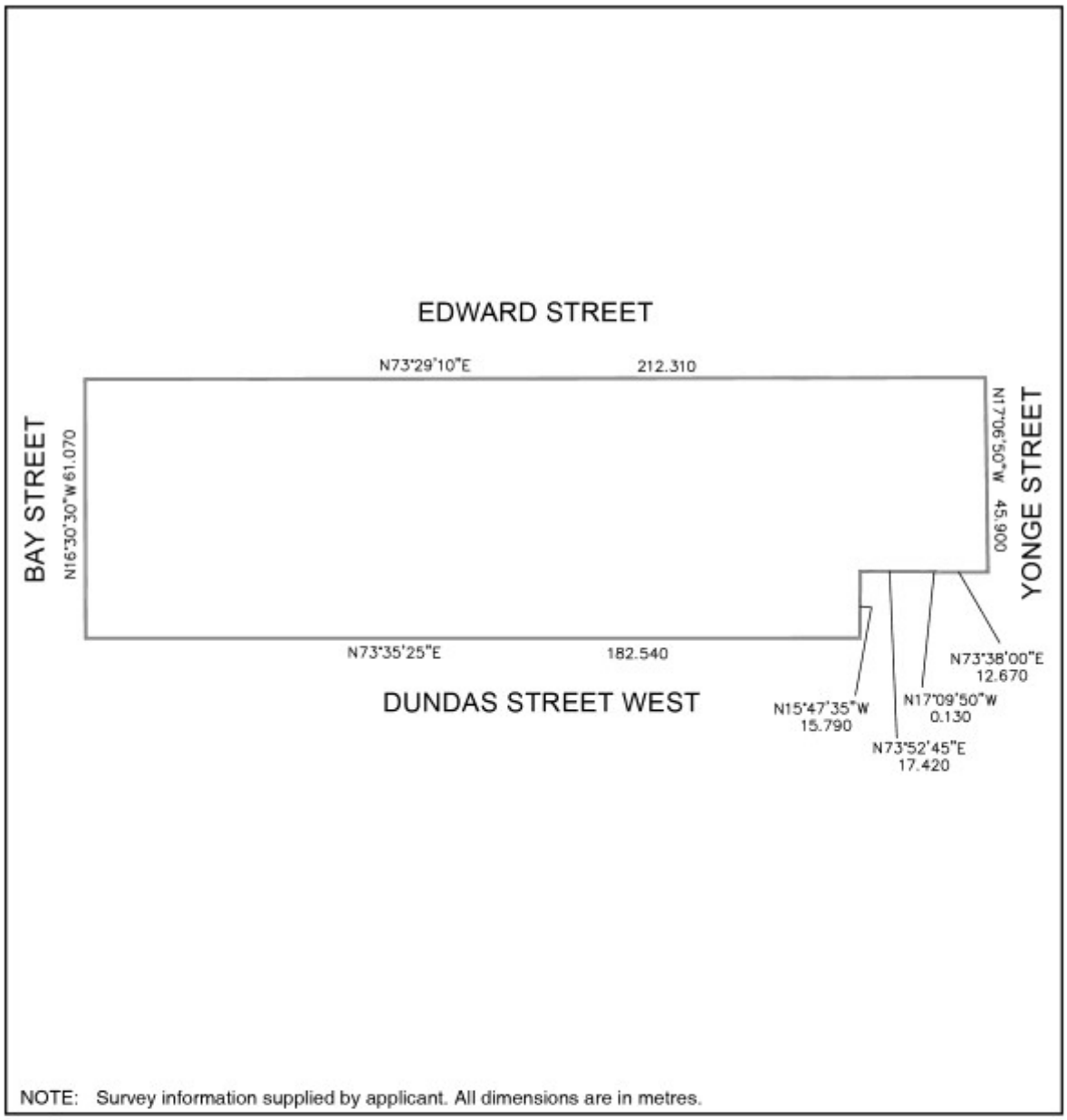
(b) all water mains and sanitary sewers, and appropriate appurtenances, have been installed and are operational.

Enacted and passed on _____

Frances Nunziata,
Speaker

John Elvidge,
City Clerk

(Seal of the City)



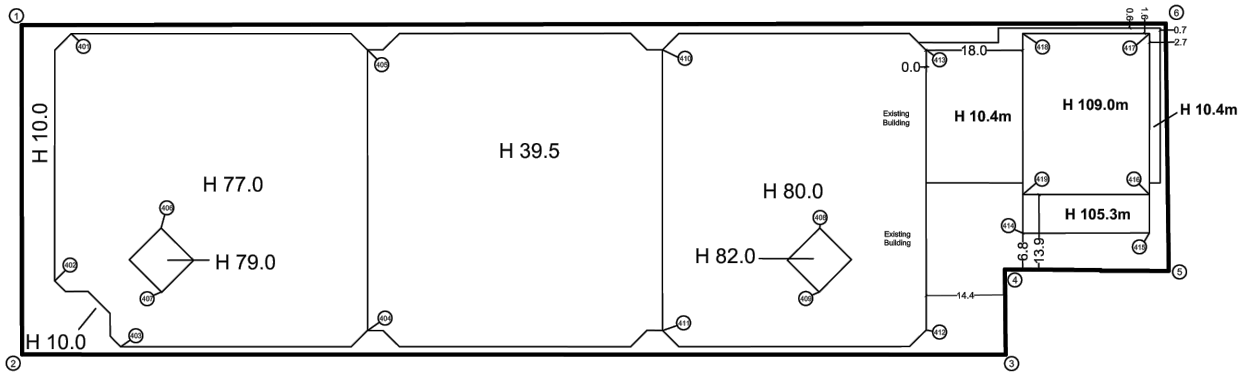
TORONTO City Planning

595 Bay St., 14-80 Dundas St. W. & 304-316 Yonge St.

Map 1

File # 13 166022 OZ

Not to Scale
D10/18/2013



COORDINATE POINT TABLE - WGS84(ITRF2008) UTM ZONE 17
EPOCH MARCH 16, 2016

Point #	Northing	Easting	Elevation (CGVD28:PRE78)	Elevation (CGVD2013)	Description	Latitude	Longitude
1	N=4834978.489	E=630321.966	94.15	93.63	BOUNDARY	N 43°39'22.984594"	W 79°23'1.742972"
2	N=4834920.277	E=630340.369	93.25	92.73	BOUNDARY	N 43°39'21.086797"	W 79°23'0.972317"
3	N=4834974.980	E=630514.449	92.48	91.96	BOUNDARY	N 43°39'22.749332"	W 79°22'53.155965"
4	N=4834989.985	E=630509.540	93.36	92.84	BOUNDARY	N 43°39'23.2386"	W 79°22'53.362006"
5	N=483998.879	E=630538.666	92.45	91.93	BOUNDARY	N 43°39'23.508374"	W 79°22'52.054423"
6	N=4835042.480	E=630524.331	92.58	92.06	BOUNDARY	N 43°39'24.93018"	W 79°22'52.656209"
401	N=4834979.686	E=630331.245	169.69	169.17	BUILDING CORNER AT ROOF ELEVATION	N 43°39'23.019851"	W 79°23'1.343151"
402	N=4834935.050	E=630342.095	169.69	169.17	BUILDING CORNER AT ROOF ELEVATION	N 43°39'211.566726"	W 79°23'0.897763"
403	N=4834927.077	E=630357.433	169.69	169.17	BUILDING CORNER AT ROOF ELEVATION	N 43°39'21.296695"	W 79°23'0.220191"
404	N=4834943.685	E=630400.172	169.69	169.17	BUILDING CORNER AT ROOF ELEVATION	N 43°39'21.809861"	W 79°22'58.298429"
405	N=4834993.339	E=630384.594	169.69	169.17	BUILDING CORNER AT ROOF ELEVATION	N 43°39'23.428563"	W 79°22'58.950437"
406	N=4834950.316	E=630357.982	171.69	171.17	BUILDING CORNER AT ROOF ELEVATION	N 43°39'22.05135"	W 79°23'0.175487"
407	N=4834938.947	E=630361.450	171.69	171.17	BUILDING CORNER AT ROOF ELEVATION	N 43°39'21.680782"	W 79°23'0.030615"
408	N=4834987.015	E=630474.508	174.69	174.17	BUILDING CORNER AT ROOF ELEVATION	N 43°39'23.166857"	W 79°22'54.943298"
409	N=4834975.645	E=630477.976	174.69	174.17	BUILDING CORNER AT ROOF ELEVATION	N 43°39'22.796255"	W 79°22'54.798434"
410	N=4835009.768	E=630436.764	172.69	172.17	BUILDING CORNER AT ROOF ELEVATION	N 43°39'23.927949"	W 79°22'56.607926"
411	N=4834960.150	E=630452.451	172.69	172.17	BUILDING CORNER AT ROOF ELEVATION	N 43°39'22.310308"	W 79°22'55.951024"
412	N=4834974.869	E=630499.022	172.69	172.17	BUILDING CORNER AT ROOF ELEVATION	N 43°39'22.757824"	W 79°22'53.859899"
413	N=4835024.460	E=630483.411	172.69	172.17	BUILDING CORNER AT ROOF ELEVATION	N 43°39'24.374499"	W 79°22'54.513399"
414	N=4834997.408	E=630510.742	197.99	197.47	BUILDING CORNER AT ROOF ELEVATION	N 43°39'23.480701"	W 79°22'53.317225"
415	N=4835004.460	E=630533.151	197.99	197.47	BUILDING CORNER AT ROOF ELEVATION	N 43°39'23.695052"	W 79°22'52.311018"
416	N=4835011.278	E=630531.006	201.69	201.17	BUILDING CORNER AT ROOF ELEVATION	N 43°39'23.917313"	W 79°22'52.400826"
417	N=4835039.746	E=630522.043	201.69	201.17	BUILDING CORNER AT ROOF ELEVATION	N 43°39'24.845389"	W 79°22'52.776007"
418	N=4835032.693	E=630499.636	201.69	201.17	BUILDING CORNER AT ROOF ELEVATION	N 43°39'24.631004"	W 79°22'53.78213"
419	N=4835004.224	E=630508.597	201.69	201.17	BUILDING CORNER AT ROOF ELEVATION	N 43°39'23.702929"	W 79°22'53.407035"

NOTE: All dimensions are in metres.

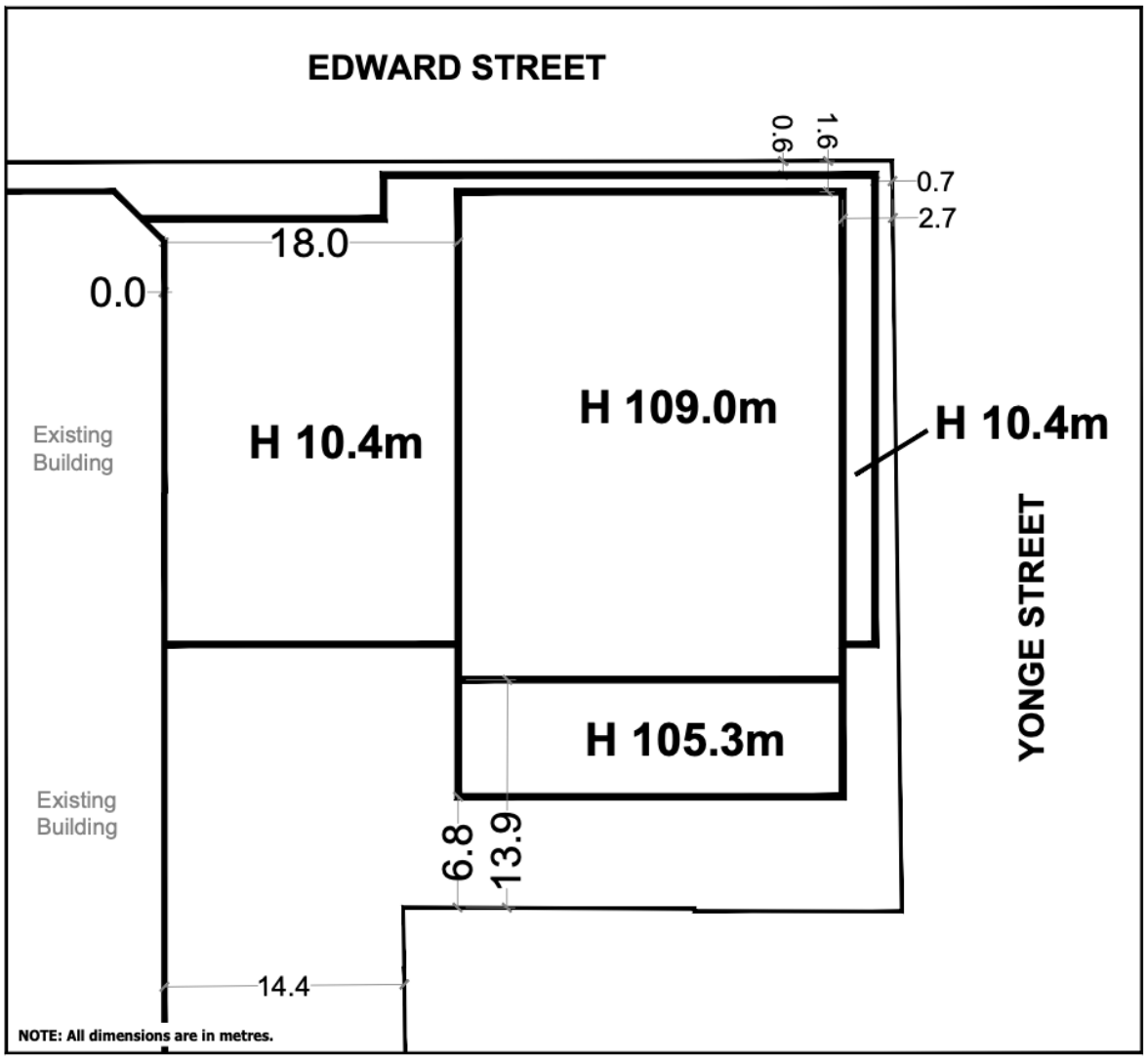
TORONTO

595 Bay Street, Toronto

Map 2

File #_____

Not to Scale



TORONTO

595 Bay Street, Toronto

Map 2A

File #_____

Not to Scale

Attachment C

Avia NG’s Finding Drawings

1. Diagram No. 1 - 15-17 Elm Street – Avia NG Aeronautical Impact Assessment 15-17 Elm Street Dated April 23, 2025
2. Diagram No. 2 – 595 Bay Street – Avia NG Aeronautical Impact Assessment 15-17 Elm Street Dated April 23, 2025
3. Diagram No. 3 – 595 Bay Street – Avia NG Aeronautical Impact Assessment 15-17 Elm Street Dated April 23, 2025

HOSPITAL FOR SICK CHILDREN HELIPORT (CNW8)		
HELIPORT CLASSIFICATION		
H1	DAY/NIGHT	VFR
HELIPORT PHYSICAL CHARACTERISTICS		
FATO WIDTH	26.25m	
ELEVATION	151.5m ASL	

FLIGHT PATH PROTECTIONS		
DATA	EASTERN ARR/DEP PATH	WESTERN ARR/DEP PATH
GEOMETRIC CENTRE	POINT-IN-SPACE	STANDARD
SAFETY AREA WIDTH	35.0m	
INNER EDGE ELEVATION	148.5m ASL	148.5m ASL
FLIGHT PATH ORIGIN LOCATION (WGS84)		
NORTHING	4835001.615	4835024.254
EASTING	630018.392	630011.452
LATITUDE	N43° 39' 23.9276"	N43° 39' 24.6655"
LONGITUDE	W79° 23' 15.2861"	W79° 23' 15.5761"
FLIGHT PATH BEARINGS (FROM)		
GRID NORTH	83.282° TO 92.196°	254.732° TO 258.732°
TRUE NORTH	84.395° TO 93.309°	255.845° TO 259.845°
OBSTACLE LIMITATION SURFACES - APPROACH/TAKE-OFF SURFACE		
DIVERGENCE	15%	15%
FIRST SECTION LENGTH	345.0m	625.0m
FIRST SECTION SLOPE	0%	0%
SECOND SECTION LENGTH	280.0m	450.0m
SECOND SECTION SLOPE	12% [1:8.33]	12% [1:8.33]
THIRD SECTION LENGTH	450.0m	N/A
THIRD SECTION SLOPE	5% [1:20]	N/A
FOURTH SECTION LENGTH	236.9m	N/A
FOURTH SECTION SLOPE	0%	N/A
FIFTH SECTION LENGTH	288.6m	N/A
FIFTH SECTION SLOPE	16% [1:6.25]	N/A
OVERALL LENGTH	1075.0m	1075.0m

WESTERN
FIRST SECTION
SLOPE 0%
START ELEV.: 148.5m ASL
END ELEV.: 148.5m ASL

EASTERN
FIRST SECTION
SLOPE 0%
START ELEV.: 148.5m ASL
END ELEV.: 148.5m ASL

EASTERN
SECOND SECTION
SLOPE 12%
START ELEV.: 163.5m ASL
END ELEV.: 197.1m ASL

EASTERN
THIRD SECTION
SLOPE 5%
START ELEV.: 197.1m ASL
END ELEV.: 219.6m ASL

EASTERN
FOURTH SECTION
SLOPE 0%
START ELEV.: 215.0m ASL
END ELEV.: 215.0m ASL

EASTERN
FIFTH SECTION
SLOPE 16%
START ELEV.: 254.7m ASL
END ELEV.: 300.9m ASL

FATO
ELEV.: 151.5m ASL

SAFETY AREA
ELEV.: 151.5m ASL

15-17 ELM STREET
APPROXIMATE PROPERTY BOUNDARY

EASTERN
APPROACH/TAKE-OFF SURFACE
AND ARRIVAL/DEPARTURE PATH

84.395°T

93.309°T

APPROACH/TAKE-OFF SURFACE
DIVERGENCE 15%

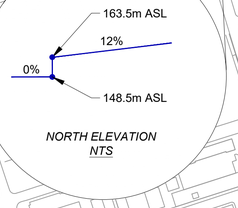
WESTERN
APPROACH/TAKE-OFF SURFACE
AND ARRIVAL/DEPARTURE PATH

259.845°T

255.845°T

WESTERN
SECOND SECTION
SLOPE 12%
START ELEV.: 148.5m ASL
END ELEV.: 202.5m ASL

EASTERN
APPROACH/TAKE-OFF SURFACE
DIVERGENCE 15%



NORTH ELEVATION
NTS

SCALE 1:4000

INSET

EVALUATION POINT 1-1
APPROXIMATE WALL LOCATION
MAXIMUM ELEVATION 192.95 m ASL
APROXIMATE INTRUSION TO FLIGHT PATH 24.6 m

EVALUATION POINT 1-2
APPROXIMATE PARAPET LOCATION
MAXIMUM ELEVATION 192.95 m ASL
APROXIMATE INTRUSION TO FLIGHT PATH 24.1 m

SCALE 1:1000

Legend
OBSTACLE LIMITATION SURFACE (OLS)
OLS ELEVATION CONTOUR (m ASL)
FLIGHT PATH PROJECTED CENTRELINE

Notes
1. COORDINATES COMPUTED FROM SURVEY DATED MARCH 16th, 2016.
2. COORDINATES UNLESS OTHERWISE SPECIFIED ARE IN WGS84 (ITRF 2008) UTM Z17 AND ELEVATIONS IN REFERENCE TO CGVD2013.
3. GEOID HEIGHT COMPUTED AS -37.184 METRES RELATIVE TO WGS84.
4. AVIA NG INC. DO NOT TAKE RESPONSIBILITY FOR THE ACCURACY OF UNDERLYING CADASTRAL DATA.
5. UNDERLYING CADASTRAL DATA SUBJECT TO CHANGE.

Scale
Scale 1:4000
50 0 25 50 100 200 300 METRES
200 0 100 200 500 1000 FEET
SCALE BASED ON SHEET SIZE 22" X 34"

SickKids
THE HOSPITAL FOR SICK CHILDREN
Client: THE HOSPITAL FOR SICK CHILDREN

AVIA • NG
AIRPORT CONSULTANTS
Consultant: AVIA NG INC.

GRID NORTH
N W E S

Location: TORONTO, ONTARIO

Title:
HOSPITAL FOR SICK CHILDREN HELIPORT
ENHANCED FLIGHT PATH PROTECTIONS - O. REG. 10/24
AERONAUTICAL IMPACT ASSESSMENT 2
15-17 ELM STREET

Date:	May 1, 2025	Avia NG Project No.:	22-0118-00
Amendment No.:	0	Diagram No.:	1 - 15-17 ELM STREET

HOSPITAL FOR SICK CHILDREN HELIPORT (CNW8)		
HELIPORT CLASSIFICATION		
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HELIPORT PHYSICAL CHARACTERISTICS		
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TRUE NORTH	84.395° TO 93.309°	255.845° TO 259.845°
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THIRD SECTION SLOPE	5% [1:20]	N/A
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FOURTH SECTION SLOPE	0%	N/A
FIFTH SECTION LENGTH	288.6m	N/A
FIFTH SECTION SLOPE	16% [1:6.25]	N/A
OVERALL LENGTH	1075.0m	1075.0m

WESTERN
FIRST SECTION
SLOPE 0%
START ELEV.: 148.5m ASL
END ELEV.: 148.5m ASL

FATO
ELEV.: 151.5m ASL

SAFETY AREA
ELEV.: 151.5m ASL

EASTERN
FIRST SECTION
SLOPE 0%
START ELEV.: 148.5m ASL
END ELEV.: 148.5m ASL

EASTERN
SECOND SECTION
SLOPE 12%
START ELEV.: 163.5m ASL
END ELEV.: 197.1m ASL

EASTERN
THIRD SECTION
SLOPE 5%
START ELEV.: 197.1m ASL
END ELEV.: 219.6m ASL

EASTERN
FOURTH SECTION
SLOPE 0%
START ELEV.: 215.0m ASL
END ELEV.: 215.0m ASL

EASTERN
FIFTH SECTION
SLOPE 16%
START ELEV.: 254.7m ASL
END ELEV.: 300.9m ASL

EASTERN
APPROACH/TAKE-OFF SURFACE
AND ARRIVAL/DEPARTURE PATH

APPROACH/TAKE-OFF SURFACE
DIVERGENCE 15%

WESTERN
APPROACH/TAKE-OFF SURFACE
AND ARRIVAL/DEPARTURE PATH

WESTERN
SECOND SECTION
SLOPE 12%
START ELEV.: 148.5m ASL
END ELEV.: 202.5m ASL

595 BAY STREET,
14-40 DUNDAS STREET WEST,
& 304-316 YONGE STREET
APPROX PROPERTY BOUNDARY

84.395°T
93.309°T
259.845°T
255.845°T
300.9 m ASL
219.6 m ASL
202.5m ASL
148.5m ASL

163.5m ASL
12%
0%
148.5m ASL
NORTH ELEVATION
NTS

SCALE 1:4000

INSET

EVALUATION POINT 2-7
BUILDING TOWER
NO EXCEPTIONS
MAX. ELEVATION: 202.74 m ASL
INTRUSION TO FLIGHT PATH: 24.9 m

EVALUATION POINT 2-8
BUILDING TOWER
EXCEPTION 438-86 (1)(e)(i)
VERTICAL PROJECTION OF 6.0m
MAX. ELEVATION: 208.74 m ASL
INTRUSION TO FLIGHT PATH: 30.8 m

EVALUATION POINT 2-3
TOWER ROOFTOP
NO EXCEPTIONS
MAX. ELEVATION: 170.74 m ASL
INTRUSION TO FLIGHT PATH: 22.2 m

EVALUATION POINT 2-4
TOWER ROOFTOP
EXCEPTION 438-86 (1)(e)(i)
VERTICAL PROJECTION OF 6.0 m
MAX. ELEVATION: 176.74 m ASL
INTRUSION TO FLIGHT PATH: 28.2 m

EVALUATION POINT 2-5
TOWER ROOFTOP
NO EXCEPTIONS
MAX. ELEVATION 173.74 m ASL
INTRUSION TO FLIGHT PATH: 3.3 m

EVALUATION POINT 2-6
TOWER ROOFTOP
EXCEPTION 438-86 (1)(e)(i)
VERTICAL PROJECTION OF 6.0m
MAX. ELEVATION 179.74 m ASL
INTRUSION TO FLIGHT PATH: 2.3 m

SCALE 1:2000

Legend
OBSTACLE LIMITATION SURFACE (OLS)
OLS ELEVATION CONTOUR (m ASL) — 162.0 —
FLIGHT PATH PROJECTED CENTRELINE

Notes
1. COORDINATES COMPUTED FROM SURVEY DATED MARCH 16th, 2016.
2. COORDINATES UNLESS OTHERWISE SPECIFIED ARE IN WGS84 (ITRF 2008) UTM Z17 AND ELEVATIONS IN REFERENCE TO CGVD2013.
3. GEOID HEIGHT COMPUTED AS -37.184 METRES RELATIVE TO WGS84.
4. AVIA NG INC. DO NOT TAKE RESPONSIBILITY FOR THE ACCURACY OF UNDERLYING CADASTRAL DATA.
5. UNDERLYING CADASTRAL DATA SUBJECT TO CHANGE.

Scale
Scale 1:4000
50 0 25 50 100 200 300 METRES
200 0 100 200 500 1000 FEET
SCALE BASED ON SHEET SIZE 22" X 34"

SickKids
THE HOSPITAL FOR SICK CHILDREN
Client: THE HOSPITAL FOR SICK CHILDREN

AVIA • NG
AIRPORT CONSULTANTS
Consultant: AVIA NG INC.

GRID NORTH
N W E S

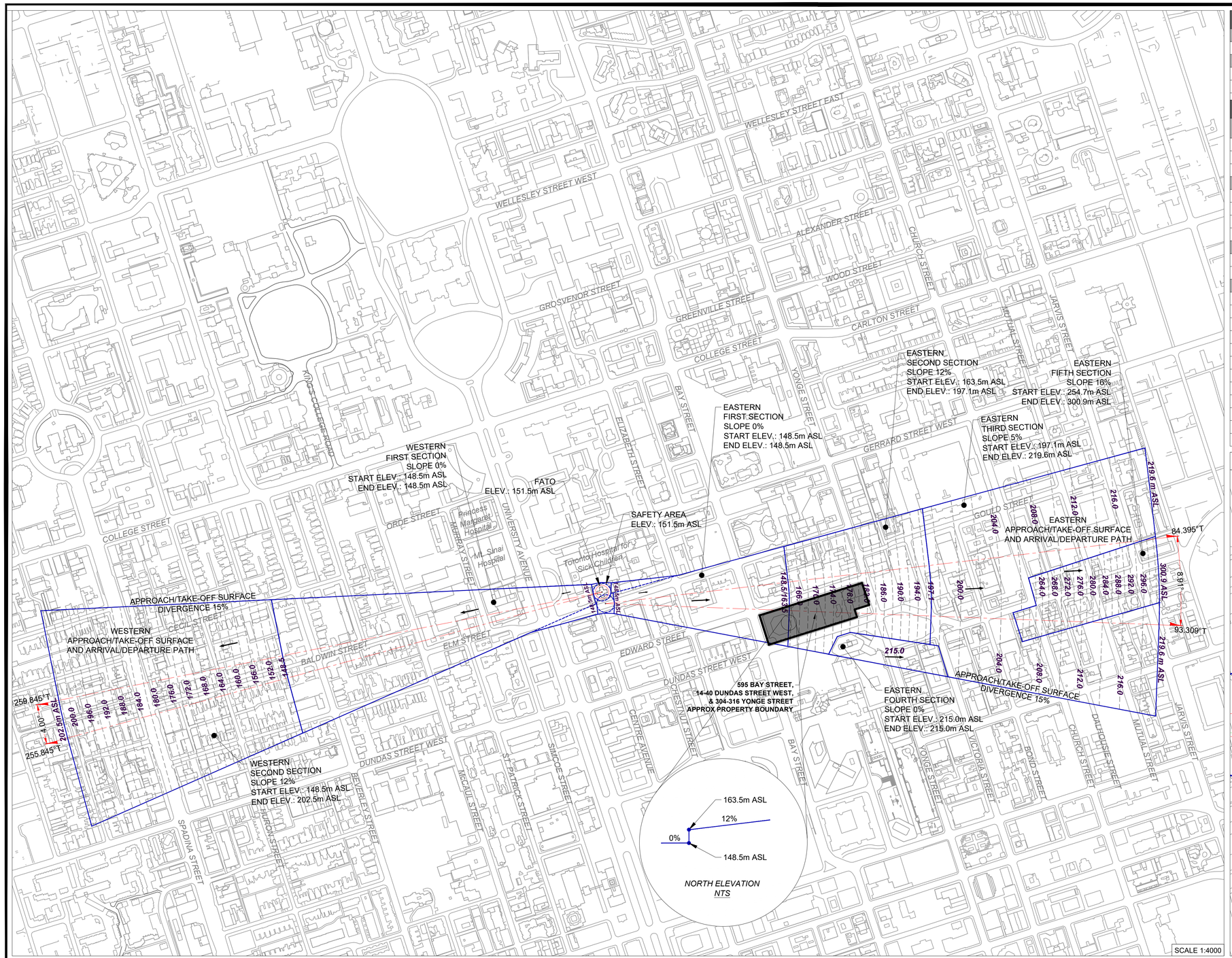
Location: TORONTO, ONTARIO

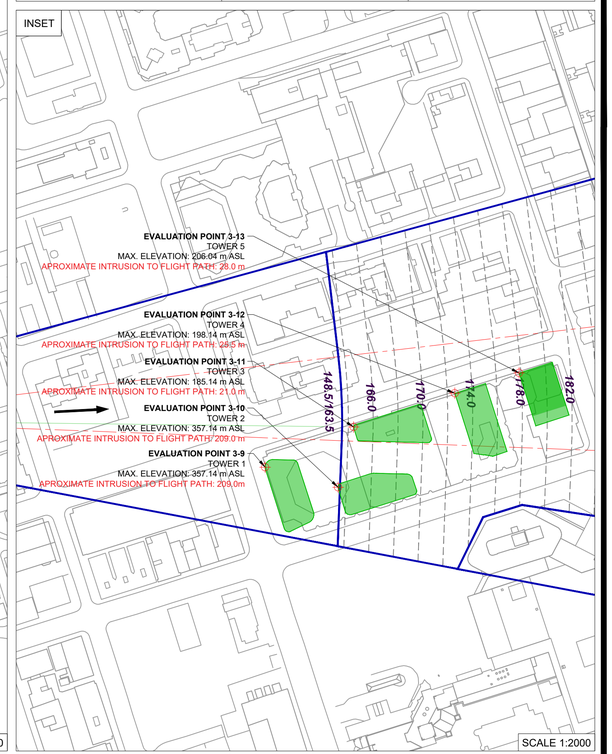
Title: **HOSPITAL FOR SICK CHILDREN HELIPORT**
ENHANCED FLIGHT PATH PROTECTIONS - O. REG. 10/24
AERONAUTICAL IMPACT ASSESSMENT 2
595 BAY STREET - 306 YONGE STREET

Date:	MAY 1, 2025	Avia NG Project No.:	22-0118-00
Amendment No.:	0	Diagram No.:	2 - 595 BAY STREET

HOSPITAL FOR SICK CHILDREN HELIPORT (CNW8)		
HELIPORT CLASSIFICATION		
H1	DAY/NIGHT	VFR
HELIPORT PHYSICAL CHARACTERISTICS		
FATO WIDTH	26.25m	
ELEVATION	151.5m ASL	

FLIGHT PATH PROTECTIONS		
DATA	EASTERN ARR/DEP PATH	WESTERN ARR/DEP PATH
GEOMETRIC CENTRE	POINT-IN-SPACE	STANDARD
SAFETY AREA WIDTH	35.0m	
INNER EDGE ELEVATION	148.5m ASL	148.5m ASL
FLIGHT PATH ORIGIN LOCATION (WGS84)		
NORTHING	4835001.615	4835024.254
EASTING	630018.392	630011.452
LATITUDE	N43° 39' 23.9276"	N43° 39' 24.6655"
LONGITUDE	W79° 23' 15.2861"	W79° 23' 15.5761"
FLIGHT PATH BEARINGS (FROM)		
GRID NORTH	83.282° TO 92.196°	254.732° TO 258.732°
TRUE NORTH	84.395° TO 93.309°	255.845° TO 259.845°
OBSTACLE LIMITATION SURFACES - APPROACH/TAKE-OFF SURFACE		
DIVERGENCE	15%	15%
FIRST SECTION LENGTH	345.0m	625.0m
FIRST SECTION SLOPE	0%	0%
SECOND SECTION LENGTH	280.0m	450.0m
SECOND SECTION SLOPE	12% [1:8.33]	12% [1:8.33]
THIRD SECTION LENGTH	450.0m	N/A
THIRD SECTION SLOPE	5% [1:20]	N/A
FOURTH SECTION LENGTH	236.9m	N/A
FOURTH SECTION SLOPE	0%	N/A
FIFTH SECTION LENGTH	288.6m	N/A
FIFTH SECTION SLOPE	16% [1:6.25]	N/A
OVERALL LENGTH	1075.0m	1075.0m





Legend
OBSTACLE LIMITATION SURFACE (OLS)
OLS ELEVATION CONTOUR (m ASL)
FLIGHT PATH PROJECTED CENTRELINE
162.0

Notes
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THE HOSPITAL FOR SICK CHILDREN
Client: THE HOSPITAL FOR SICK CHILDREN

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AIRPORT CONSULTANTS
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GRID NORTH
N W E S

Location: TORONTO, ONTARIO

Title:
HOSPITAL FOR SICK CHILDREN HELIPORT
ENHANCED FLIGHT PATH PROTECTIONS - O. REG. 10/24
AERONAUTICAL IMPACT ASSESSMENT 2
595 BAY STREET - 306 YONGE STREET 5 TOWER APPLICATION

Date: MAY 1, 2025
Avia NG Project No.: 22-0118-00
Amendment No.: 0
Diagram No.: 3 - 595 BAY STREET