

28 October 2022

Re: Shadow Study Analysis
Project No: 21-182 10 West, Mississauga

Latitude: N 43 degrees 55'60"
Longitude: W 79 degrees 58'45"

The shadow study was prepared by CORE Architects Inc. The proposed building was massed based on re-issued for OPA/Rezoning drawing set, dated 28 October 2022, also prepared by CORE. In the attached shadow study, the proposed building shadow is shown in light yellow, the existing shadows of the context buildings is shown in grey.

True north was determined from site survey prepared by J.D. Barnes Ltd on 07 December 2021. The base plan was created by CORE Architects Inc. in Autocad using survey for the immediate site context and google maps and street view to estimate the location and height of extended context buildings.

3.1 Residential Private Outdoor Amenity Spaces

The existing context consists of single family townhomes at the north east corner of Hurontario Street and Park Street East. There is no shadow casting on this property within the "no impact" zone on June 21 and September 21 for no more than two consecutive hourly test time.

3.2 Communal Outdoor Amenity Areas

Sun Access Factors for the communal outdoor amenity are as below:

Sun Access Factor	Area of Sunshine (m2)	Total Area of Space (m2)	Average of Values
September / March 21	459.04	775.2	0.60
June 21	465.2	775.2	0.60
December 21	348.53	775.2	0.45

The common outdoor amenity areas are located on Ground, Level 2 and Level 7. With Sun Factor of 0.6 for June and September, all three levels will get most of its sunshine during the morning and early afternoon hours. However, Level 2 is located on the lower podium terrace. It will be shaded in most time during afternoon hours in June. The area of sunshine increases in afternoon in March/September.

The sun access factor for December is slightly lower than the city guideline. Level 2 and Ground floor outdoor amenity is located adjacent to the tower which it will be partially shaded during certain times of the day when the sun is at a lower altitude. The sun access factor of 0.45 is still acceptable as the outdoor areas are less utilized during the winter months.

3.3 Public Realm

The public realm includes the following:

1. Opposite boulevards of Ann Street and Park Street.
2. North and south parks.
3. South mews between proposed development and 84 High Street.
4. Outdoor space adjacent to Lions Club of Credit Valley.

Mixed Use, Commercial, Employment and High Density Residential Streets

The boulevards were reviewed under mixed use, commercial, employment and high density residential streets on September 21 between 12:12 pm-5:12 pm.

Shadows from the proposed development shade parts of the boulevard on Park Street on 12:12 pm only. There is no shadow impact on the opposite boulevard of Ann Street from 12:12pm – 5:12pm.

Public Open Spaces, Parks and Plazas

Shadows from the proposed development shade parts of the north park from 1:12 pm-5:12 pm and shade parts of the outdoor space at Lions Club on 5:12pm.

Sun Access Factor for public open spaces and parks is as below:

Sun Access Factor	Area of Sunshine (m2)	Total Area of Space (m2)	Average of Values
September / March 21	10,388.55	11,139.4	0.93

The sun access factor of 0.93 has exceeded 50% on September 21.

3.5 Building Faces to Allow for the Possibility of Using Solar Energy

The single family townhomes at the north east corner of Hurontario Street and Park Street East has no shadow impact from the proposed developments within the “no impact” zone on September 21.

Sincerely
core architects inc.

Babak Eslahjou, Principal, B. Arch, OAA, MRAIC

A handwritten signature in black ink, appearing to read 'Babak Eslahjou', with a large, stylized flourish extending from the end of the name.

Cc file

Anthony DiSanto

FRAM + Slokker

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