

February 21, 2024

1785 Bloor Holdings Inc.
204-181 Eglinton Avenue East
Toronto, Ontario, M4P 1J4

Re: 1785 Bloor Street – Shadow Study Letter

To whom it may concern:

The shadow studies prepared and submitted by onespace unlimited inc. have been prepared in accordance with the City of Mississauga Terms of Reference standards for shadow studies. 1785 Bloor Street is located at 43.62537627003984, -79.58600348519923 and north was determined using the survey provided to us by R-PE Surveying Ltd. The base plan for this site model was derived from Google Earth in conjunction with the existing site survey.

3.1 Residential Private Outdoor Amenity Spaces

As part of this shadow study analysis, we reviewed the impact of the proposed development on the private rear yards of the adjacent low-rise neighbourhood. We note that the proposed development shadows did not reach the “no impact zone” at any point during the day of June 21st. The shadow did overlap this zone on September 21st after 15:12 but for no more than 2 consecutive hourly test times. The results were the same for December 21st with shadows starting in the “no impact zone” as early as 11:17am but quickly moving out of that zone for each home. From this we can conclude that the proposed development meets the requirements of this criteria.

3.2 Communal Outdoor Amenity Areas

We reviewed the Sun Access Factor for the private amenity areas within the proposed development and included the roof top amenity space on the 11th floor. June 21st complies with Sun Access Factor of 0.63. September achieved a Sun Access Factor of 0.52 and December achieved 0.42. Although the December study did not achieve a Sun Access Factor of 0.50 or higher, most of the shadowing on the amenity space is due to the impact of the existing buildings surrounding the space. The proposed building imposes minimal shadows on the proposed outdoor amenity space.

Each amenity space was studied individually and resulted in the following Sun Access Factors:

June 21st

Off-Leash Dog Area: 0.86
Kids Play Area: 0.44
Roof Top Amenity: 0.72
Central Amenity By Parking: 0.52

September 21st

Off-Leash Dog Area: 0.66
Kids Play Area: 0.59
Roof Top Amenity: 0.86
Central Amenity By Parking: 0.27

December 21st

Off-Leash Dog Area: 0.55
Kids Play Area: 0.48
Roof Top Amenity: 0.79
Central Amenity By Parking: 0.18

Overall, most of the amenity uses achieved a Sun Access Factor over 0.50 for each day studied. However, in June the kids play area was under because of the existing building shadows. In September the central amenity area was under and in December the kids play area and central amenity spaces had lower Sun Access Factors. Although a few areas scored lower, the other amenity options scored over the minimum 0.50 indicating that there still a significant amount of amenity area provided with good sun exposure.

The Sun Access Factor was also studied for the neighbouring properties and their communal outdoor amenity areas.

June 21st

1759 Bloor Street: 0.75
1835 Bloor Street: 0.74
3375 Ponytrail Drive: 0.53
3395 Ponytrail Drive: 0.72
3401 Ponytrail Drive: 0.87

September 21st

1759 Bloor Street: 0.62
1835 Bloor Street: 0.62
3375 Ponytrail Drive: 0.23 (existing SAF is 0.32)
3395 Ponytrail Drive: 0.45 (existing SAF is 0.66)
3401 Ponytrail Drive: 0.74

December 21st

1759 Bloor Street: 0.36 (existing SAF is 0.36)
1835 Bloor Street: 0.66

3375 Ponytrail Drive: 0.23 (existing SAF is 0.23)

3395 Ponytrail Drive: 0.39 (existing SAF is 0.51)

3401 Ponytrail Drive: 0.44 (existing SAF is 0.70)

The Sun Access Factor of 0.50 or higher is achieved for all properties during June 21st. On September 21st the study noted that 3375 and 3395 Ponytrail Drive did not achieve an SAF of 0.50, however the existing SAF for 3375 Ponytrail Drive is only 0.32 and already does not comply. For 3395 Ponytrail Drive the existing SAF is 0.66 in September. When studied further it is noted that there are 2 distinct areas within the property that are generally shaded at different times in the day so there is always sunshine available. For example, on September 21st at 11:12 the outdoor area adjacent the proposed development is in shade while the rest of the outdoor area closest to 3395 is in nearly full sun. On September 21st at 15:12 the outdoor area adjacent to the proposed development is in full sun while the existing building shadows onto the middle amenity space.

A similar pattern is noted for 3395 and 3401 Ponytrail Drive on December 21st. The existing Sun Access Factors were above 0.50 however sections of the amenity areas alternate being in sun vs shade. For example on December 21st at 14:17 the amenity spaces closest to the proposed development receive full sun while the portions between the existing building are in shade, due to existing shadows. Earlier in the day between 10:17 and 11:17 the middle amenity space receives more sun. For 1759 Bloor Street and 3375 Ponytrail Drive, the proposed development shadows do not impact the low SAF for these properties. All the shadows are created by their own building or by existing neighbouring properties.

3.3 Public Realm, Public Open Spaces, Parks and Plazas

The criteria for maximizing the use of the public realm were studied for the proposed development. During the day of September 21st, we conclude that the proposed building does not cast any shadows onto the opposite boulevard until after 17:48 and thus meets these requirements. The only other public open space adjacent to the site is Off Road Trail 11. The proposed development casts shadows on portions of the trail between 13:12 and 17:48.

3.4 Turf and Flower Gardens in Public Parks

The only public park area surrounding the proposed development site is Off Road Trail 11. It receives full sun between 8:35 and 12:12 on September 21st. After that, minimal shadows cover a small area of the trail between 13:12 and 16:12. Further shadowing occurs from 17:12 to sunset at 17:48. Although the entire trail is not in full sun for 7 of the test times provided on September 21st, there is very little existing planting on this trail that would be impacted by the additional shadows. The trail consists mainly of grass and an asphalt walkway thus it can be determined that there is no significant impact from the proposed development.

3.5 Building Faces to allow for the possibility of using solar energy

We reviewed the impact of the proposed development on the adjacent low-rise neighbourhood and the possibility of harvesting solar energy. We note that the proposed development shadows reach the “no impact zone” after 15:12 on September 21st but does not linger on each home for more than 2 consecutive hourly test times. From this we can conclude that the proposed development meets the requirements of this criteria.

Summary Conclusion:

Our analysis shows that the impact on the adjacent properties is acceptable both in duration and placement of shadows. The orientation of the proposed development on the site is designed in such a way that the building casts narrow shadows towards the adjacent low-rise neighbourhood so there is no long periods of shadow on any one property. Having the proposed amenity spaces relocated to be south of the new building also allows for maximized sun exposure on the communal outdoor areas. Areas that benefit from direct sunlight have ample exposure during relevant timeframes. In conclusion, it can be determined that there is no significant increase to the existing shadows due to the proposed development.

I trust this is satisfactory.

Yours truly,

onespace unlimited inc . architecture + interior design

A handwritten signature in black ink, appearing to read 'D. Iafrate', with a long horizontal stroke extending to the right.

Don Iafrate, B.Tech., M.Arch., OAA, LEED AP
VP-studio operations, Architect