



SUN & SHADOW STUDY ADDENDUM

PICKERING HARBOUR REDEVELOPMENT VISION

591 LIVERPOOL ROAD, PICKERING PREPARED FOR: PICKERING HARBOUR COMPANY LTD.







SHADOW ANALYSIS

The following visuals include all streets, lots, and open spaces as well as buildings to an adequate distance to demonstrate the shadow impacts during the requested times. The shadow conditions from other abutting buildings have been included. Shadow diagrams have been prepared with a massing reference plan plotted at a standard metric scale with a bar scale on each sheet. The shadow cast by the revised plan of the proposed development is shown in yellow in contrast with the shadows from existing buildings in gray. For the purpose of this *Addendum*, the shadow cast by the previous two 23-storey proposed development is also shown, outlined in by the red dashed line.

The following test times have been used:

 March/September 23, June 21, and December 21 at: 9:18 am, 11:18 am, 1:18 pm, 3:18 pm, and 5:18 (if before sunset).



March/September 23rd at 9:18AM UTC: -04:00





March/September 23rd at 11:18AM UTC: -04:00



March/September 23rd at 1:18PM UTC: -04:00





March/September 23rd at 3:18PM UTC: -04:00



March/September 23rd at 5:18PM UTC: -04:00





June 21st at 9:18AM UTC: -04:00



June 21st at 11:18AM UTC: -04:00





June 21st at 1:18PM UTC: -04:00



June 21st at 3:18PM UTC: -04:00





June 21st at 5:18PM UTC: -04:00



December 21st at 9:18AM UTC: -05:00





December 21st at 11:18AM UTC: -05:00



December 21st at 1:18PM UTC: -05:00





December 21st at 3:18PM UTC: -05:00

CONCLUSION

The shadow impacts of the revised plan for the proposed development on the surrounding area as shown in this study is minimized by the following urban design strategies:

- Large building setbacks from Liverpool Road;
- Series of building step-backs from the 4th to the 12th storey;
- Placement of taller portions of the buildings on the east side of the Subject Site;
- Reducing the building height to 15-storeys;
- Podium height of 3-storeys; and
- Orientating the long side of the buildings to face south.

During the times shown in this study, the buildings and sidewalks located adjacent to Liverpool Road will have total access to the sunlight on all days analysed except for a small portion of the west side of the road at 9.18AM on September/March 23rd and December 21st. The shadow on the south side of the proposed promenade creates a comfortable pedestrian environment on hot days in the summer (June 21st). In comparison with the previous two 23-storey proposed development, the shadow impact on the surrounding area has been minimized given the reduced height and size of the buildings.

Therefore, it is our professional opinion that the proposed heights of the proposed development are appropriate given the findings of this Study.

Respectfully submitted,

THE BIGLIERI GROUP LTD.

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