

April 4, 2022

Luc Oullet, Planner III
Planning & Development
Halifax Regional Municipality
40 Alderney Drive
Halifax NS B3J 3A5

Re: Case 20218 Spring Garden West Shadow Impact Study

Dear Luc,

In accordance with the *Halifax Regional Centre Land Use By-law Appendix 2: Shadow Impact Assessment Protocol and Performance Standards*, please find the attached Shadow Impact Study and following written analysis. This analysis was performed on behalf of our client Dixel Developments Ltd.

The shadow study was completed using Trimble Sketchup 3D modelling software, with geo-location data inputs as specified in Appendix 2 (UTC -3:00, (location 44.6639° N, 63.5847° W)). The study was set to September 21st, with outputs in fifteen-minute increments from 8am to 6pm.

There is approximately 12 hours of sunlight at the equinox (September 21st). The sun rises at 7:00am, and sets at 7:13pm. During early morning and late evening hours, the sun angle produces elongated shadows. These elongated shadows pronounce the shading effects of all objects, sometimes up to 10x the object height. This is typical of the seasonal lighting conditions.

Shading impacts are mitigated by the project massing design; the residential towers are divided into two separate masses, rather than a single “slab” form, which reduces the size of the shadow impact and creates a break in the shadow being cast. The rotational nature of the shadow impact creates faster moving shadows at the top of the building, helping to ensure shading impacts are reduced in duration.

**MacKay-Lyons
Sweetapple
Architects Limited**

2188 Gottingen Street
Halifax, Nova Scotia
Canada B3K 3B4
www.mlsarchitects.ca

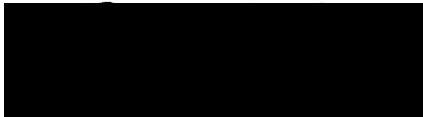
t 902.429.1867
f 902.429.6276
info@mlsarchitects.ca

Balcom Square Park has limited shadow impacts, experiencing early morning shadows, but no impact the rest of the day. There are no shadows impacting the Public Gardens at this date of the equinox. As well, shadows do not reach the more distant Victoria Park.

Shadows do not cast on the west facing facades of the Carlton street heritage buildings until 3:00pm, with coverage increasing through-out the afternoon. The podium and setback of the proposed development benefit the heritage buildings, as the shape of the shadow impact is reduced. While the heritage buildings experience shadow, it is considered reasonable and typical of dense urban developments.

If additional comment is requested, please do not hesitate to contact the firm.

Sincerely,



Talbot Sweetapple, Principal

