



## **SHADOW IMPACT STUDY**

**PROPOSED 11 STOREY COMMERCIAL/MULTI-UNIT RESIDENTIAL BLDG  
1856-1870 OXFORD ST. W., LONDON, ONTARIO**

### **LONDON LOCATION**

1599 Adelaide Street N. Unit 301  
London, Ont, N5X 4E8  
P: 519.471.6667

### **KITCHENER LOCATION**

1415 Huron Rd., Unit 225  
Kitchener, Ont, N2R 0L3  
P: 519.725.8093

**Oxford West Gateway (c/o York Development)**  
303 Richmond St. Unit #201.  
London, Ontario N6B 2H8

December 22, 2021  
SBM-20-3418

**Attn: Carlos Ramirez**

**Re: Shadow Impact Study - Proposed 11 Storey Commercial/Multi-Unit Residential Building  
1856-1870 Oxford St. W., London, ON**

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Mr. Carlos Ramirez

Strik, Baldinelli, Moniz Ltd, on behalf of Oxford West Gateway (c/o York Developments) has prepared the following Shadow Impact Study, in support of zoning amendments in accordance with the submitted Site Plan application.

## **1 BUILDING DESCRIPTION**

- 11 Storey Commercial/Multi-Unit Residential Building
  - 1 Storey U/G Parking c/w 151 parking spaces
  - Main Floor Podium c/w
    - 18 Parking Spaces
    - 7 Commercial Units (Total Area: 840m<sup>2</sup>)
    - 7 Residential Units
  - 2<sup>nd</sup>-3<sup>rd</sup> Floor Podium 28 Residential Units/Floor
  - 11 storey tower c/w step back at the 4<sup>th</sup> & 7<sup>th</sup> floors
    - 4<sup>th</sup>: 14 Residential Units/Floor
    - 5<sup>th</sup>-7<sup>th</sup>: 12 Residential Units/Floor
    - 8<sup>th</sup>-11<sup>th</sup>: 10 Residential Units/Floor
  - 10 storey tower
    - 10 Residential Units/Floor
- 3,481.4m<sup>2</sup> Ground Floor Building Area
- ~29,379m<sup>2</sup> Gross Floor Area
- ~133m x 27m Ground Floor Building Footprint

## **2 PROJECT OVERVIEW**

Our understanding is the City of London does not have formal Shadow Impact Study guidelines in place. As a result, **Strik, Baldinelli, Moniz Ltd. (SBM)** has employed the *City of Waterloo* Shadow Study guidelines as the basis for this report. The *City of Waterloo's* guidelines have been widely accepted in many other municipalities, including *The City of St. Thomas*, and *The Municipality of Central Elgin*.

As per the *City of Waterloo* Shadow Study guidelines, the subject sites at **1856-1870 Oxford St. W. London ON**, have been analyzed to ensure:

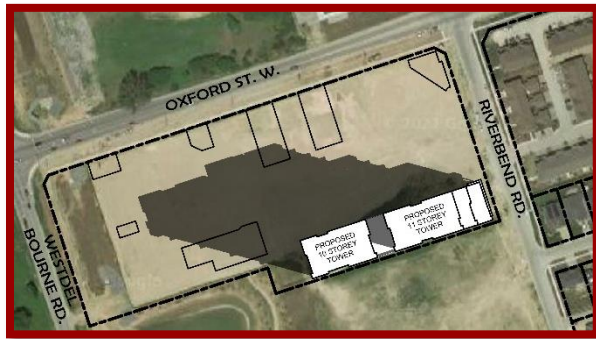
- As a principle, at least 50% or more of any property should not be shaded for more than two interval times (a 4-hour equivalency); or
- As a principle, at least 50% of any property should be in full sun for at least two interval times (a 4-hour equivalency)

The Shadow Study was prepared to reflect the proposed building massing as described in Section 1, and the latest concept site plan which depicts the building location & orientation. The following includes an assessment of the shadows cast by the proposed development in consideration of the guidelines and the existing permissions (existing zoning).

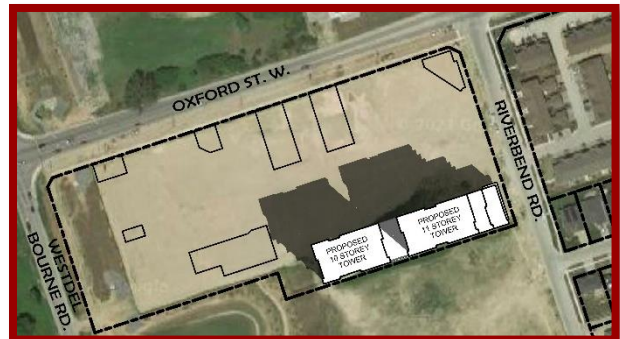
### 3 SOLAR STUDY OVERVIEW

#### 3.1 Spring/Fall Equinox (March/September)

During the Spring/Fall Equinox the shade impact of the proposed building masses will be contained to less than 50% of the proposed site at 1856-1870 Oxford St. W. Other impacts include shading of an adjacent property to the east on Riverbend Rd. For one-time interval, and the impact during that interval will result in more than 50% of the aforementioned site being shaded for no more than two consecutive time intervals. This is consistent and falls within the acceptable guidelines stated in Section 2. Other impacts will include a portion of Riverbend Rd. being covered during the time intervals just prior to sunset (~3:00pm-7:00pm)



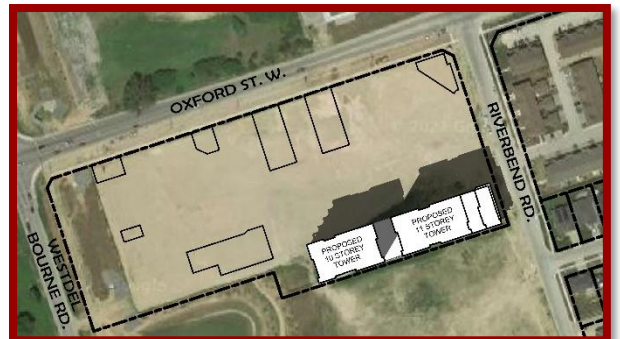
March 21 – 8am



March 21 – 10am



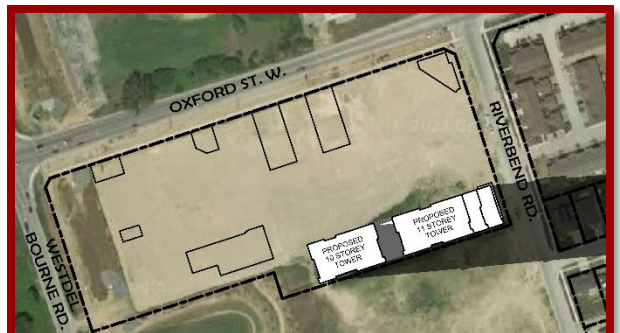
March 21 – 12pm



March 21 – 2pm



March 21 - 4pm



March 21 - 6pm

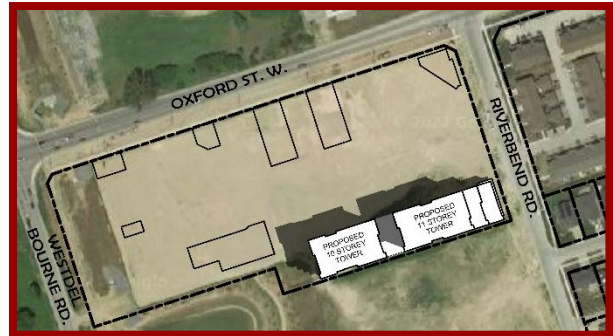


### 3.2 Summer Solstice (June)

During the Summer Solstice the shade impact of the proposed building masses will be contained to less than 50% of the proposed site at 1856-1870 Oxford St. W. However, an adjacent property to the east on Riverbend Rd. will be shaded for one-time interval, and the impact during that interval will result in more than 50% of the aforementioned site being shaded for no more than two consecutive time intervals. This is consistent and falls within the acceptable guidelines stated in Section 2. Other impacts will include a portion of Riverbend Rd. being covered during the time intervals just prior to sunset (~6:00pm-9:00)



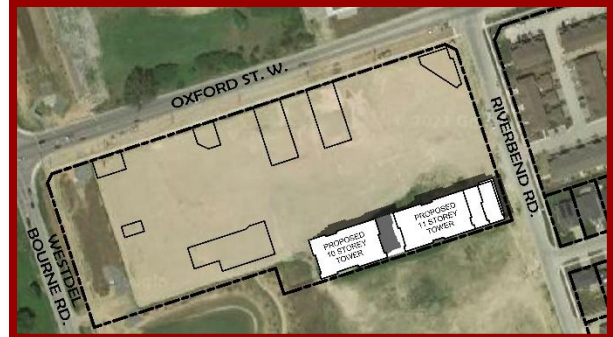
June 21 – 8am



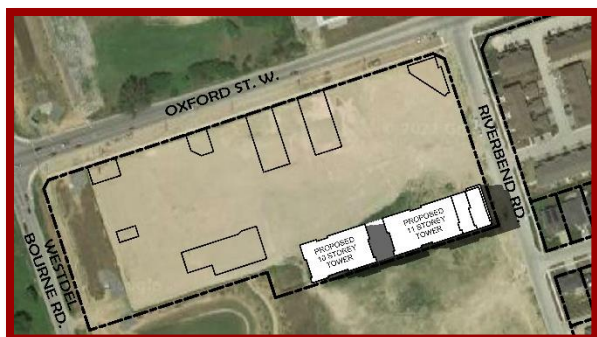
June 21 – 10am



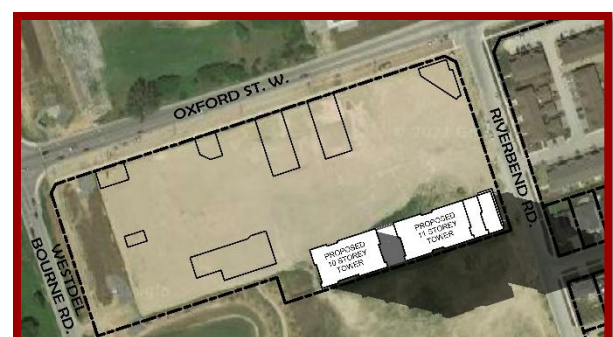
June 21 – 12pm



June 21 – 2pm



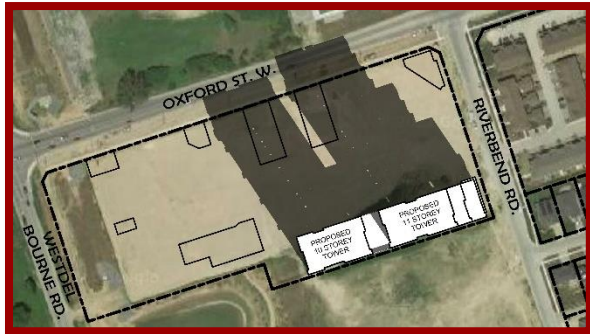
June 21 – 4pm



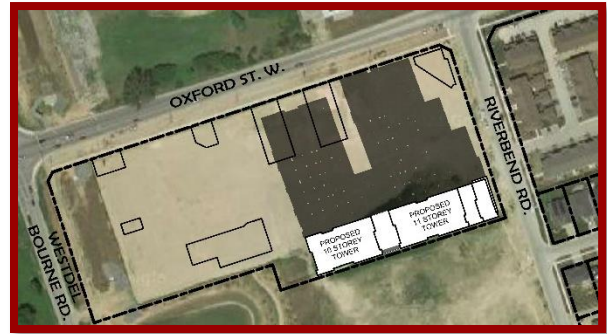
June 21 – 6pm

### 3.3 Winter Solstice (December)

During the Winter Solstice the shade impact of the proposed building masses will be contained to less than 50% of the proposed site at 1856-1870 Oxford St. W. Other impacts include shading of an adjacent property to the east on Riverbend Rd. For one-time interval, and the impact during that interval will result in more than 50% of the aforementioned site being shaded for no more than two consecutive time intervals. This is consistent and falls within the acceptable guidelines stated in Section 2. Other impacts will include a portion of Riverbend Rd. being covered during the time intervals just prior to sunset (~1:00pm-4:00pm)



December 21 – 10am



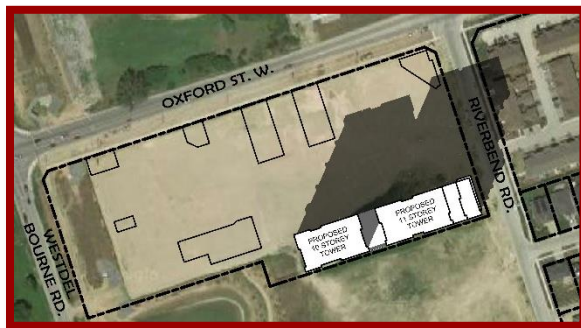
December 21 – 11am



December 21 – 12pm



December 21 – 1pm



December 21 – 2pm



December 21 – 3pm

## 4 **CONCLUSION**

Due to the size of the buildings, site, and orientation of the proposed buildings, the Shade Impact to adjacent properties is minimal and generally bounded to the confines of the proposed sites, as well as portions of Riverbend Rd. Therefore, based on our analysis of the buildings shadowing, the impact of the proposed massing on adjacent properties appears to fall within acceptable limits, as per *The City of Waterloo Shadow Study Guidelines* as previously stated in Section 2 of this report.

Respectfully submitted,

### **Strik, Baldinelli, Moniz Ltd.**

Civil • Structural • Mechanical • Electrical



Tomislav Tomljenovic, C.Tech. BCIN

Associate, Structural/Building Design Division Manager