

SHADOW STUDY

FOR

MIXED-USE COMMERCIAL / RESIDENTIAL DEVELOPMENT

AT

**1630 MAIN ST. WEST & 69 SANDERS BLVD.
HAMILTON, ONTARIO**

Prepared By:

ARCHITECTURAL DESIGN INC.
56 Pennsylvania Ave., Unit 1
Concord, ON L4K 3V9
May 2018

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1.0 PURPOSE + SITE CONTEXT

The purpose of this report is to analyze the impact of the proposed mixed-use commercial/residential development on adjacent properties to the site. This report will provide comments on how the massing of the proposed development containing a 9-storey condominium building with retail at grade and 2 Townhouse Blocks, impacts the neighbouring properties.

The property is situated at the southwest corner of Main St. West and W Park Ave., with a portion extending up north to Sanders Blvd. The proposed 9-storey building sits along Main St. West, while the 2 Townhouse Blocks are located on the strip of land extending to Sanders Blvd. The north side of Main St. West is primarily low rise residential uses, whereas to the south is a mix of commercial and industrial uses.



Figure 1 - Site Context

1.1 Neighbouring Properties

- a) South - Directly across Main St. West to the south, there exists several commercial properties including a Carstar Express, a Money Mart, a Billiards Lounge and a vacant restaurant.
- b) West - Directly to the northwest of the proposed 9-storey condominium is a 4 storey brick apartment building. To the west of the property across W Park Ave., there exists the WestPark Animal Hospital. Further north up W Park Ave., on both sides of the street (including backing on portion of development stretching up to Sanders Blvd.) is all single family residential houses. Beyond these properties is a hydro corridor where no developments exist.
- c) North - To the North directly across Sanders Blvd., there exists all single family residential houses. Beyond this, there is a ravine where no developments exist.
- d) East - Directly to the east at the corner of Main St. West and Westbourne Rd., exists a 2-1/2 storey residential brick apartment building. Directly to the north of that property lining Westbourne Rd. are several single family residential houses.

1.2 Methodology

The analysis presented in this report was developed using computer modelling for 2 seasons of the year (Winter - December 21st + Summer - June 21st) at 4 specific times (10am, 12pm, 2pm, 4pm).

Solar Information:

Location: Hamilton, Ontario

Latitude = 43.257865 deg. North

Longitude = 79.930895 deg. West

2.0 SHADOW STUDY: 9-STOREY MIXED-USE CONDOMINIUM AND 2 TOWNHOUSE BLOCKS

2.1 Winter Shadows : December 21

2.1a 10:00am

Sun is lowest in the sky at this time. The sun rises southeast of the site and moves to the south west where it will set.

- The early morning shadow extends north across the site and crosses West Park Ave. to the west and slightly across Sanders Blvd. to the north.
- Animal Hospital at north-west corner of Main St. W & W Park Ave. is not affected by shadows.
- Only a few residential properties are affected on the west side of W Park Ave.
- The 4-storey apartment building and 2 residential properties on the east side of W Park Ave. will be affected by shadows.
- Shadows extend slightly across Sanders Blvd. to the north but have little impact on properties across the street.
- Shadows do not impact residential properties along Westbourne Rd.
- Shadows do not affect properties to the south of Main St. W.

2.1b 12:00pm

The sun at noon is located directly south of the development and is still considerably low in the sky.

- Shadow extends directly north across at the site at this time.
- Shadows do not affect any properties on the west side of W Park Ave.
- The 4-storey apartment building and 2 residential properties on the east side of W Park Ave. will be affected by shadows
- Shadows extend slightly across Sanders Blvd. to the north but have little impact on properties across the street.
- Shadows do not impact residential properties along Westbourne Rd.
- Shadows do not affect properties to the south of Main St. W.

2.1c 02:00pm

Afternoon winter sun begins to cast longer shadows as the sun begins to set. The sun is located southwest of the development at this time.

- Shadows at this time extend to the north-east of the site and towards Westbourne Rd.
- Shadows do not affect any properties on the west side of W Park Ave.

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1630 Main Street W. & 69 Sanders Blvd., Hamilton, ON

- The 4-storey apartment building on the east side of W Park Ave. is only partially affected at this time. The single family residential properties on east side of W Park Ave. are not affected.
- Shadows extend slightly across Sanders Blvd. to the north but have little impact on properties across the street.
- The five single family residential properties on the west side of Westbourne Rd. are affected by shadows at this time. The 2-1/2 storey apartment building is not impacted. Shadows do not extend to the east side of Westbourne Rd., so residential properties are not impacted by shadows.
- Shadows do not affect properties to the south of Main St. W.

2.1d 04:00pm

The evening winter sun has the greatest impact at this time due to it being very low in the sky. Shadows are long as the sun will set within the next hour.

- The 4-storey apartment building on the east side of W Park Ave. is only partially affected at this time. The single family residential properties on east and west side of W Park Ave. are not affected.
- Shadows extend slightly across Sanders Blvd. to the north but have little impact on properties across the street.
- Majority of properties on the east and west side of Westbourne Rd. will see shadows at this time. The 2-1/2 storey apartment building will also be partially impacted by shadows being cast.
- A couple residences on the northwest portion of Binkley Rd. will also receive some shadows at this time of day.
- Shadows do not affect properties to the south of Main St. W.

2.2 *Summer Shadows : June 21*

2.2a 10:00am

Sun is coming from the east direction along Main St. W at this time, casting shadows almost directly to the west.

- Shadows primarily remain on the site at this time
- Shadows extend across a portion of the street of W Park Ave., however properties on the east and west side of the street are not affected at this time.
- Shadows from the Townhouse Blocks do not affect any adjacent properties.
- Properties to the north of Sanders Blvd. do not receive shadows at this time
- Properties on the east and west side of Westbourne Rd. do not receive shadows at this time.
- Shadows do not affect properties to the south of Main St. W.

2.2b 12:00pm

The sun at noon is nearly at its peak height and is located directly to the south of the development.

- Shadows from the 9-storey condominium extend directly to the north at this time. South portion of the 4-storey apartment building adjacent to the development on W Park Ave. will see small amounts of shadow.
- Shadows from the Townhouse Blocks do not affect any adjacent properties.
- Properties to the north of Sanders Blvd. do not receive shadows at this time
- Properties on the east and west side of Westbourne Rd. do not receive shadows at this time.

2.2c 2:00pm

The sun is located to the southeast at this time and is at its highest vertical height.

- Shadows from the 9-storey condominium extend slightly to the northeast and has little impact on the property directly to the east of the site.
- Shadows from the Townhouse Blocks do not affect any adjacent properties.
- Properties to the north of Sanders Blvd. do not receive shadows at this time
- Properties on the east and west side of Westbourne Rd. do not receive shadows at this time.

2.2d 4:00pm

The sun at this time is still high and in the sky and is located to the west along Sanders Blvd.

- Shadows from the 9-storey condominium will affect the 2-1/2 storey apartment building to the east of the development. The other single family residences along the west side of Westbourne Rd. are not impacted.
- Shadows from the Townhouse Blocks do not affect any adjacent properties.
- Properties to the north of Sanders Blvd. do not receive shadows at this time
- Properties on the east and west side of Westbourne Rd. do not receive shadows at this time.

3.0 SUMMARY

The proposed development will have the most affect on adjacent developments during the winter months, with little affect during the peak summer months. Winter mornings and evenings will impact the residential properties along W Park Ave & Westbourne Rd. During mid-day of winter, shadows are contained to the properties within the block between W Park Ave., Westbourne Rd., Main St. W & Sanders Blvd. Summer months sees little impact to neighbouring properties as the shadows are contained on the site. Properties directly adjacent to the east and west of the 9-storey condominium will receive small amounts of shade for small periods of the day.

When comparing the proposal to the as of right zoning shadow impact, the effects of shading will be minimal on neighbouring properties/private outdoor amenity spaces/ public spaces adjacent to the development.