

URBAN DESIGN BRIEF

DESIGN SUBMISSION TERMS OF REFERENCE

1. Design Brief Process

Urban Design Briefs will be required in conjunction with all applications for an Official Plan and Zoning Bylaw Amendments seeking permission for residential / retail – commercial & industrial uses, either within or outside designated Block Plan areas, or if required as a condition of a site plan approval.

Policy Requirement: City of Brampton’s Official Plan - Section 5 Implementation and Sub-section 5.2 Definitions

The purpose of the Urban Design Brief is to demonstrate how the application for Official Plan and/or Zoning By-law Amendment meets the principles set out in the City’s Development Design Guidelines.

The Urban Design Brief should only address special criteria and design issues that are not discussed in the applicable Development Design Guidelines.

2. Submission Requirements

The applicant is required to submit an Urban Design Brief with a ‘complete’ application for an Official Plan and/or Zoning By-law Amendment or, if required as a condition of a site plan approval. The approval of the Design Brief by the Development Services & Design Department is required prior to the enactment of the amended Official Plan and/or Zoning By law.

Please note that the Urban Design Brief should be concise. For document layout and graphic details please see the [template](#).

Initial Submission	Digital and 4 hard copies (double side print)
Each Subsequent re-submission	Digital copies
Final Submission	Digital and 4 hard copies (double side print)

3. Format Overview

The following format is required for preparation of an Urban Design Brief.

Section 1 will focus on framing the brief overview of proposal, context, site analysis and demonstrating a concise understanding of the site’s potential.

Sections 2, 3, 4 & 5 will demonstrate how the proposal addresses, public / private realm, built form and principles of sustainability and ensure that it meets the overall principles laid out in the City's Development Design Guidelines.

Table of Contents

1. Site Plan & Overview

1.1 Context

The site context mapping needs to include at minimum the following:

- Size and arrangement of blocks
- Major street network
- Land use
- Active transportation network
- Distance to public transit
- Trails and cycling Infrastructure
- Open space networks
- Proximity to amenities
 - Mapping and identify the amenities within 800 meters and/or 400 meters radius from the geographic center.
 - Amenities include: library, public park and outdoor recreational facility, public community/recreation centre, general retail, bank, place of worship, convenience store, restaurant, food retail (grocery store, supermarket), licensed adult/senior care, licensed child care, theatre, salon/barber shop, hardware store, laundromat, medical office, dental office, post office, pharmacy, school, fitness center, and museum.
 - For more Amenities description, Please refer to [Sustainable New Communities Program Metric BE-1](#)
- Heritage properties and Natural features

1.2 Opportunities and Constraints Analysis

1.3 Development Vision and Design Principles

1.4 Site Plan Concept

The concept should include at minimum the following:

- Ground floor plan with uses
- Building setback to the property lines
- Building separation distances between all proposed and adjacent buildings

2. Public / Private Realm

2.1 Linkage, Connections and Circulation

2.1.1 Active Transportation

- Provide a map showing the subject lands, a 400 meter buffer from the boundaries of the subject lands, and any existing or planned cycling networks.
- For more Active Transportation description, Please refer to [Sustainable New Communities Program Metric MB-8](#)

2.1.2 Transit

- Include a map that shows the 200 meter, 400 meter, and/or 800 meter radius and the existing or planned commuter rail, subway, light rail, and bus stops with frequent service.
- For more Transit description, Please refer to [Sustainable New Communities Program Metric MB-9](#)

2.1.3 Trails and Cycling Infrastructure

- Mapping existing and planned multi-use trails, bicycled infrastructures, and amenities for pedestrians and cyclists located in the proposed development.
- For more Trails and Cycling description, Please refer to [Sustainable New Communities Program Metric MB-7](#)

2.1.4 Circulation plan demonstrating vehicular and pedestrian circulation to the site

2.2 Landscape Plan

2.2.1 Streetscape

2.2.2 Outdoor Amenity

2.2.3 Parking

2.2.4 Service Areas

3. Built Form

3.1 Built Form

- Building heights, setbacks, step backs and floor plate sizes must be mentioned
- Views of 3D Massing model
- Transition to adjacent uses and built form if applicable, e.g. High-Rise development adjacent to a Low-Rise residential neighborhood

3.2 Elevation Drawings & Perspective Renderings / Views

4. Sustainability

- What is the final score this project achieve on Sustainable New Communities Program? Does the design proposal achieve a minimum score (within the Bronze threshold)?
- Is the project applying for green building certification such as Leadership in Energy and Environmental Design (LEED)?
- What building and landscaping approaches or technologies are being used to reduce the building environmental impact?

5. Implementation

5.1 Recommended OPA / ZBL Policies (If Applicable)

5.2 Residential Design Brief: Design Review and Approval Process (If Applicable)

5.3 Conform to the most updated City wide Development Design Guidelines

6. Sun/Shadow and Wind Study

6.1 Sun/Shadow Study (Refer to Sun/Shadow Study Terms of Reference – attached at the end of this document)

6.2 Pedestrian Level Wind Study (Refer to [Wind Study Terms of Reference](#))

4. General requirements for the Urban Design Brief (See [template](#))

- I. Ensure that a cover memo with the City of Brampton's file number is attached to the Urban Design Brief and submitted to the attention of development planner at the front counter.
- II. The guidelines should not read as a description of the project, they should set out principles for the development of the site.
- III. Urban Design brief's cover page requirements:
 - Submission title
 - Location
 - Prepared by: company name
 - Prepared for: company name
 - City of Brampton's file number
 - Submission number
 - Submission date
 - Appropriate stamp

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- IV. Ensure that the font style and size are Arial 12.
- V. Provide pertinent text in bullet points to support the maps and images. Number each bullet point. See the attached template.
- VI. Text should be in bullet points with action verbs (Example: Ensure safe, well delineated pedestrian connections are provided from the adjacent streets)
- VII. Provide high quality maps and graphics, conforming to the examples shown in the template.
- VIII. Number all maps and graphics and also provide appropriate captions.
- IX. Provide bar scale and north arrow on all the maps. See the attached template.
- X. Some complex sites may require additional pages and will be dealt on a case by case basis

1. Purpose

To ensure that new developments fit harmoniously into its planned context and to adequately limiting any resulting shadowing a Sun/Shadow Study is required.

A Sun/Shadow Study is a technical document that provides a visual model and written description of the impact of shadows cast by a proposed development on the subject lands and on surrounding streets, parks, and properties including residential areas, community outdoor amenity areas (such as children play areas, school yards, tot lots and amenity areas associated with commercial and employment areas), and the public realm (sidewalks, open spaces, parks and plazas).

These studies are done to evaluate the impact of shadows at various times of day throughout the year.

The submission of a Sun/Shadow Study with development applications would complement the City's development review process and demonstrate the shadow impacts of development proposals internally and on surrounding property.

This terms of reference provides guidance on what should be included in a Sun/Shadow Study

2. When a Sun/shadow Study is required?

A Sun/Shadow Study will be submitted as part of a development application for a Zoning Bylaw Amendment or Site Plan for development projects over 6-storeys in height.

Sun/Shadow tests may also be requested for developments lower than 6-storeys, in particular on rezoning applications where additional height is applied for near shadow sensitive areas (including adjacent residential properties, parks, schoolyards, cemeteries etc).

3. Test Times

In order to measure the hours of sunlight window, Sun/Shadow tests should be done at the following dates/times:

September 21, June 21, and December 21, at the following times

- Solar Noon (SN)

- Hourly intervals before and after Solar Noon (SN), up to and including 1.5 hours after sunrise and 1.5 hours before sunset

Time Zone: Eastern Standard Time: UT - 5 hours Daylight Time: UT - 4 hours
UT denotes Universal Time i.e. Greenwich Mean Time

4. Submission Requirements

A Sun/shadow testing of alternative building massing may be required during the application review to assist in making decisions about how to best achieve goals regarding sun/shadow impacts. When the massing of the application has been agreed to, a final Sun/Shadow Study will be prepared to the following standards:

a. Model

The model should clearly indicate the following:

- Development site;
- Property boundaries;
- Building foot prints and mass within the test site;
- Streets; and,
- Adjacent public parks, amenity spaces, cemeteries and/or accessible open spaces.

Modeling will have two parts, the first showing the existing situation and the second showing the proposed development in its context. The proposed development context should include other approved but not built buildings within the model area. These should be indicated graphically as different from the proposal and the built context.

The model should show the proposed development in its context, to a distance adequate to show the shadow impacts during the requested test times.

b. Summary Letter

In addition to the model, a letter that summarizes the study and the sun/shadow impacts of the proposed development is required. This should include a summary outlining how the shadow impact evaluation has been met and a description of any mitigating features that have been incorporated into the site and building design. If applicable, a description and assessment of all locations or uses not meeting the shadow impact evaluation should also be provided.

A condition of Site Plan Approval will be placed to ensure that the recommendations of the shadow analysis are fully implemented, prior to the City releasing any associated securities.

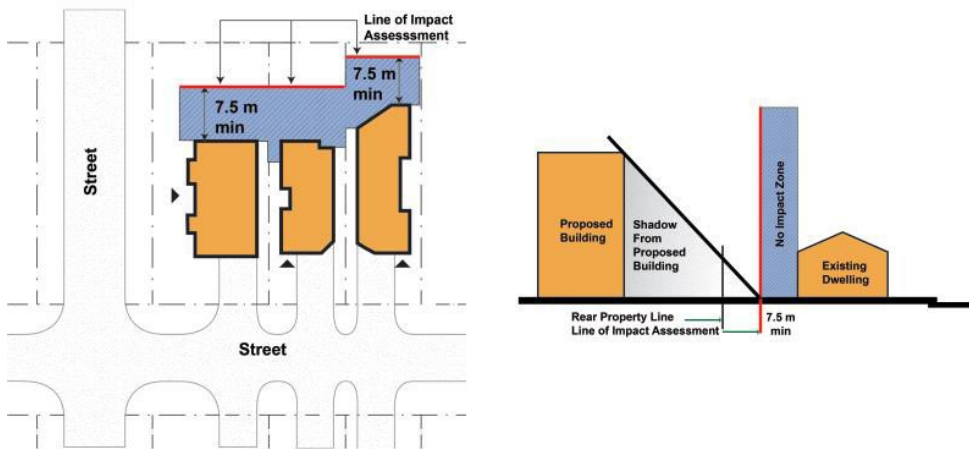
- c. One digital and a hard copy of the study are to be provided with the Urban Design Brief in the same format.
- d. A digital file of the development massing model, preferably in Google SketchUp.
** Note: Additional dates and times for the study may be requested at the discretion of the City staff.*

5. Evaluation Criteria

Adequate sunlight should be ensured on

a. Residential Private Outdoor Amenity Areas

This criterion is met if there is shadow impact for no more than two consecutive hourly test times within the space between the exterior wall of the dwelling that abuts the amenity space and the line of impact assessment (“No Impact Zone”), on **June 21 and September 21st**.



(Fig 1) Shadow Impact on Residential Private Outdoor Amenity Areas

The line of impact assessment shall be, a line **7.5 m** minimum from the rear wall or other appropriate exterior building wall of the dwelling that abuts the private amenity space. See Fig. 1

New shadows shall not result in less than **2 hours of direct sunlight**.

Where less than 2 hours of sunlight already exists within the “No Impact Zone”, no new shade may be added.

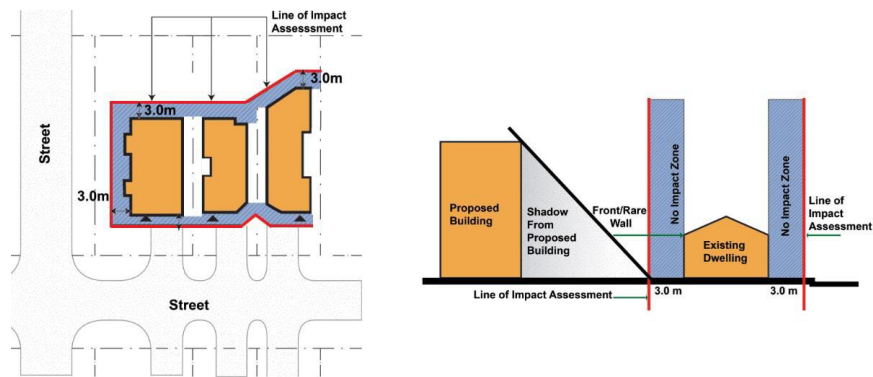
Balconies are considered “residential private outdoor amenity spaces” if they are the only outdoor living area available to the dwelling unit.

b. Building faces

Shadow impacts from proposed developments should not exceed one hour in duration on the roofs, front, rear and exterior side walls of adjacent low rise (one to four storeys) residential buildings including townhouses, detached and semi-detached dwellings on **September 21**.

The line of impact assessment shall be a line at grade, **3m** from the front, rear and exterior side wall of the adjacent low rise residential building. See Fig 2

This criterion is met if there is shadow impact for no more than two consecutive hourly test times in the “No Impact Zone” i.e. the space between the front, rear and exterior side walls of the adjacent low-rise residential buildings and the respective lines of impact assessment.



(Fig 2) Shadow Impact on Building Faces

c. Communal Outdoor amenity areas

Communal outdoor amenity areas or other outdoor sun sensitive activity areas including, children’s play areas, school yards, tot lots, outdoor amenity areas used by seniors and park features such as sandboxes, wading pools, etc. and those associated with commercial and employment areas during spring, summer, fall and winter.

Shadows from proposed developments should allow for full sun on the above places at least half the time, or 50% sun coverage all the time, on each of the following dates: **June 21, September 21 and December 21**.

If the period of prime use can be clearly identified, the above need only apply to that period – not all the test times.

This criterion applies to public amenity areas and common outdoor amenity areas that are part of a proposed or existing development and is met if the “sun access factor” is at least 50% or 0.5 on each of the test dates ($As(ave)/AT = 0.5$ or more).

To calculate Sun Access Factor:

- Measure the total Area (AT) of the space or feature
- Measure the area in sunshine (AS) for each of the test times from 1.5 hours after sunrise to 1.5 hours before sunset both inclusive
- Find the average of the AS values (AS (ave))
- Sun Access Factor = $As(ave)/AT$