

1. Purpose

3D Building Massing Model is required for illustrating and reviewing the proposal in its existing and planned context. The Terms of Reference provides technical guidance for standardized 3D Building Massing Model. It provides directions on details of the submission requirements and when it would be required.

2. Description

A 3D Building Massing Model of the proposed development is to be prepared to allow staff to evaluate the proposal's design as well as its physical impacts on its surroundings. The model in context is intended to be used for the following purposes:

- Review of the application.
- Staff Report illustration.

3. Objectives

To ensure that new developments will be massed to make a positive contribution to the public realm, minimize the impact on neighbouring buildings and open space, fit harmoniously within the surrounding context and the City's skyline.

4. When required

3D Building Massing Model will be submitted as part of a development application for buildings with 6 storeys or more, for the following applications types

- Official Plan Amendments.
- Zoning By-law Amendments.
- Site Plan Control applications.

5. Submission Requirements

In preparation for the 3D Building Massing Model, the submission requirements are as follow:

- Name the file using the following convention: **Revision#_3D_Massing_CityFileNumber** (Example: R0_3D_Massing_OZS_2020_0001)
 - Revision #: Each submission to the city has a revision number. Original Submissions should be identified by R0. Each submission after should be assigned a revision number in chronological order. (Example: Revision 1 is R1, Revision 2 is R2).
 - City File Number is the File Number assigned to each Planning Application submission.
 - When uploading the model to BramPlanOnline, the Category is 3D Model
- Use metric 1:1 scale
- The model should be in City's geographic coordinate system, NAD 1983 CSRS UTM Zone 17N (EPSG: 2958), GCS WGS 1984 (ESPG: 4326), or WGS 1984 Web Mercator Auxiliary Sphere (EPSG: 3857) and positioned geographically correctly
- Conceptual massing which includes:
 - Building envelope only/external structure.
 - Property Survey Information with dimensions and Average Grade @ sea level
 - Site landscaping layout and elements (Differentiate softscapes and hardscapes through the use of color).

- Site access points and pedestrian/vehicular networks (colored faces on the ground)
- Surrounding streets and street names.
- Curbs, parking and ingress/egress.
- Outline of entrance/exit to underground parking.
- Building outlines and minimum setbacks with dimensions.
- Loading areas/docks.

6. Format of the Model

Preferred:

- SKP – SketchUp 2020 or earlier

Acceptable:

- DWG – AutoCAD 2020 or earlier
- OBJ – Wavefront Object
- 3DM – Rhinoceros 3D
- Please organize the model into 5 layers/tags:
 - Envelope
 - External Structure Element
 - Property Survey Information
 - Landscape Elements
 - Pedestrian/vehicular networks
- Notes for the SketchUp file,
 - Ensure connecting lines are a face.
 - Separate elements onto different layers (tags) and then create a “component” for all identical elements or “group” for atypical elements.
- Notes for AutoCAD files,
 - Delete irrelevant information such as hatching or irrelevant layers. Leave only polygons or polylines needed.
 - Ensure that all polygons are closed.
 - Do not xref any files (bind xref files with the insert option under the bind command).
 - Ensure that all the work is saved in model space.
- General Notes for all files,
 - Ensure that all polygons are closed
 - Provide relevant layers ONLY

- Proposed and existing elements should be on separate layers, with the prefix “Proposed” or “Existing” in the layers’ (tags)

7. Accompanying AutoCAD file with the model:

- To snap your model into context, the City requires submission of an accompanying AutoCAD file with the model:
 - The proposal should be in the City’s geographic coordinate system, NAD 1983 CSRS UTM Zone 17N (EPSG: 2958), and positioned geographically correctly
 - following the City’s Digital Submission Standards – Block Plan, includes layer naming conventions
 - Appendix A: https://www.brampton.ca/EN/Business/planning-development/Documents/e-Forms/DevServ/Block_Plan_Complete_Package.pdf
 - using the City’s appropriate seed file: <https://www.brampton.ca/en/Business/planning-development/Pages/Applications.aspx>
 - containing:
 - Property Survey Information with dimensions and Average Grade @ sea level
 - street text including surrounding streets
 - curbs, parking and ingress/egress
 - underground parking outline with entrance/exit
 - building outlines and minimum setbacks with dimensions
 - loading areas/docks