3D Model

PURPOSE:

This document provides guidance for the preparation of a 3D Model which may be required for the submission of an application under the *Planning* Act. All 3D Models shall follow the guidelines referenced in this document.

A 3D Model is a digital, three dimensional building massing and site model of a proposed development which provides information to assess the impacts of a development on existing and planned surroundings. It assists staff in their evaluation of a proposed development within the existing and planned context and can be used to help assess how elements such as building scale, massing and wall planes impact skylines, shadowing, the pedestrian realm, and site functionality. It also assists informing context for future planning applications.

The City of Hamilton's Planning Division is currently building a detailed computer-generated 3D model of the City. To assist with application review, all new development proposals six storeys in height or taller will be required to submit digital models of proposed developments as part of a complete application.

PREPARED BY:

3D Models must be prepared by an Architectural Technician (MAATO), Licensed Architect (RAIC), or a Registered Professional Planner (RPP).

CONTENTS:

A 3D Model should include the following technical elements**:**

Note: The software and file type requirements listed below are subject to future amendments in accordance with industry standards for the preparation of a 3D Model. This document will be modified as required to reflect industry standards.

Preferred:

- SKP – SketchUp 2019 or earlier; or,
- Multipatch – ESRI File geodatabase.
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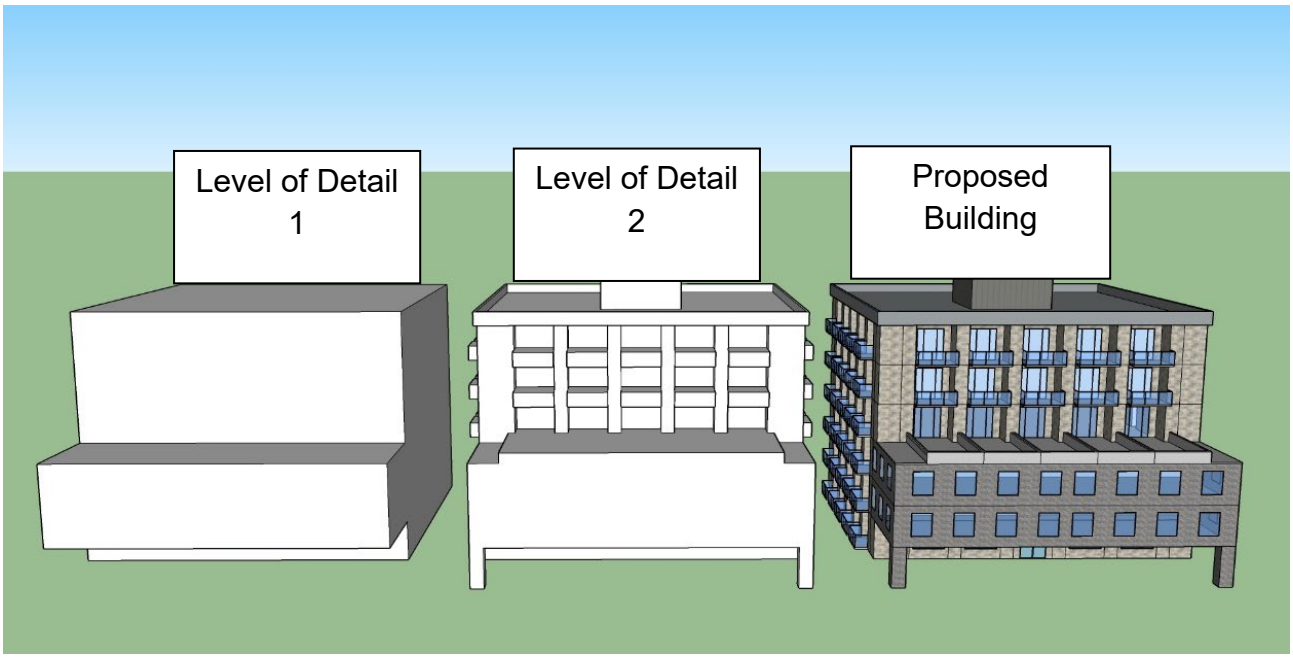
Acceptable:

- OBJ – Wavefront Technologies;
- DAE – COLLADA interchange format; or,
- KMZ – Keyhole Markup Language Zipped.
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Required Content for Building Mass Model:

- Name the file with the project's file number (I.e. "DA_22_001_3DModel.skp");
- Use Metric scale;
- The model must use the City's geographic coordinate system, NAD 27 MTM 3 or WGS 84 and be correctly positioned geographically;
- The model should not have hatching or textures;
- All faces of the 3D Digital Model need to be directed outwards (i.e. Outward facing normal). This may be checked on SketchUp by turning on the monochrome face style;
- Models may have Level of Detail 1 if submitting with a Formal Consultation. Level of Detail 2 is required for all other development applications;
    - Level of Detail 1:
        - Only exterior walls and roof;
        - No roof parapet; and,
        - No mechanical penthouse;
    - Level of Detail 2:
        - Exterior walls and roof;
        - Roof parapet;
        - Mechanical penthouse; and,
        - Balconies extruded to height of railing; and,
- Models must not have any groupings or components.

EXAMPLE:



Checklist for digital 3D Digital Model submission

File format is one of the following: skp, gdb, obj, dae, kmz.;

Appropriate level of detail;

Units in metre;

Correctly geolocated;

Outward facing normal;

Correct file name scheme;

Watertight model; and,

Removed hatching and textures.

OTHER INFORMATION:

Files should not be encrypted with password protection.

REVIEWED AND APPROVED BY:

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