

Planning Information Sheet: 3D Model for Significant Developments

INTRODUCTION

The purpose of this information sheet is to provide technical guidance and requirements for submitting 3D digital models for development applications to the City of Canning.

WHICH DEVELOPMENT PROPOSALS REQUIRE A 3D MODEL?

All Significant Development proposals are to provide a 3D Model for assessment purposes. The definition of Significant Development (as in LP.06 - Design Review Panel and Assessment of Significant Developments) is as follows;

Significant Development refers to any proposed development, where at least 1 of the following criteria applies:

- a) Multiple dwelling, and mixed use developments, that comprise more than 10 units; or
- b) Development that is three storeys or more in height (single houses exempt); or
- c) Any Precinct Structure Plans, or Structure Plans; or
- d) Development not of the kind referred to above, but which in the opinion of the delegated officer is:
 - i. Of a complex or contentious nature;
 - ii. Likely to be of significant interest to the community;
 - iii. A commercial development (i.e. Shopping Centre) that is significant in scale; and
 - iv. A significant application that is eligible for consideration by the Development Assessment Panel (or Joint Development Assessment Panel), pursuant to Part 2, Section 5 and 6 of the Planning and Development (Development Assessment Panels) Regulations 2015;
 - v. Involves unusual or unconventional design elements; or
 - vi. Is likely to benefit from referral to the DRP.

TECHNICAL SPECIFICATIONS

All 3D digital models must adhere to the following requirements:

- a) General
 - Accurate and true representation of the proposed development.
 - The entire development must be modelled up to the property boundary.
 - Only the external elements (except floor slabs) are required.
 - Model must include correct ground level fall across the site.
 - Only the external building envelope is to be provided. Internal layouts must be deleted.
 - Please ensure that there are no missing or displaced parts of the model after export (except those that are intentionally removed).
- b) Position
 - The base units must be in metres (0.00m).

- The height, as a Z value, must be used in accordance with the Australian Height Datum (AHD).
- If geo-referenced, use the GDA94 / MGA zone 50 coordinate system.
- If not geo-referenced, models need to be provided as object-centred, having both the origin and pivot point at 0,0,0. A plan must also be provided that indicates applicable offsets from the title boundary if the model does not occupy the entire site.
- Rotation must be in accordance with the cadastral alignment.

c) Polygons

- All redundant lines, splines, helpers, dummy's, cameras, trees, shrubs, vehicles, casework, furniture and minor fixings must be removed.
- All unnecessary features must be removed from the model, especially internal features, spherical or tubular objects and overly complex features.
- Redundant and duplicate polygons, lines or textures must also be removed.
- Models should be exported as a shell, where walls and glass panels are made into a full 3D form.
- Models must have only single-sided faces that do not overlap and normals facing outward.
- A single face with no additional polygons should replace internal, external and side faces.
- Highly complex external features such as vegetation should be removed or simplified and replaced with billboard style vegetation models.

d) Textures

- Only standard material types will be accepted (No materials which are specialised for professional rendering software, e.g. Mental Ray, V-Ray).
- Textures sent along with the model must be in JPG, TIFF, or PNG format.
- Colours must be added if textures are not supplied.
- The model must be purged of all unused texture and object links.

SketchUp <i>Preferred format</i>	<ul style="list-style-type: none"> • Remove/delete all furniture, fixtures, entourage and other unrequired objects. • Use standard colours or materials in JPEG or PNG formats. • Opacity maps can be used (preferably PNG). • Provide clean model in native SKP 8.0 format.
Autodesk 3DS Max	<ul style="list-style-type: none"> • Remove/delete all furniture, fixtures, entourage and other unrequired objects. • Use standard colours or materials in JPEG or PNG formats. • Use diffuse colours or textures in JPEG; TIFF or PNG formats. • Opacity maps can be used, PNG format only.
Autodesk Revit	<ul style="list-style-type: none"> • Remove/delete all furniture, fixtures, entourage and other unrequired objects within the model. This includes stairs and handrails. • Ensure 3D view detail level is set 'Coarse'. • Export model to one of the specified formats.
Archicad	<ul style="list-style-type: none"> • Turn off or delete non-required objects within a 3D view and set scale to 1:1. • Include any textures with the delivered model folder. • Export model to one of the specified formats. • Ensure correct colours have been assigned to objects when saving to SKP.

Disclaimer

This information sheet is provided as generalised information. While we aim to keep the content of this document current and accurate, we accept no responsibility or warranties for actions based on the information provided. The City of Canning encourages you to seek professional advice before acting on any information contained in this document. Please contact the City of Canning if you wish to comment on the forms provided and information contained within. Any reported errors will be amended.

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