



CITY of PERTH

PLANNING & DEVELOPMENT APPLICATION

3D MODEL SPECIFICATION

INTRODUCTION

The City of Perth is developing a digital 3D virtual model of its local government area. The main purposes of the model are to :-

- Assist in the evaluation of development applications;
- Assist in urban design and enhancement projects;
- Provide a virtual environment into which developers and the City can place design and development concepts;
- Present the existing City and proposed developments and enhancements in a 3D virtual environment.

This document defines the criteria for creating the preferred 3D models for use within the City of Perth Virtual Model.

At various stages during the design development, varying types of models may be required to be submitted. These include, preliminary compliant blocks, built form models, development application (DA) models and possibly a building application or as-constructed model. Generally only a DA model is required, however, please refer to your Planning officer for guidance.

The submitted model (if development commences) will be used to update the City's Level 1 model data for future reference by Council and external consultants. The level 1 model and terrain mesh are available upon request.

THIS DOCUMENT IS TO BE READ IN CONJUNCTION WITH THE DIGITAL RIGHTS MANAGEMENT POLICY FOR PLANNING SUBMISSIONS.

MODELLING SPECIFICATION

1. MODEL SCALE / UNITS

Model units **must be in meters**. This scaling must be completed prior to submission.

2. HEIGHTS

All heights are to be referenced from **AHD**. To facilitate the correct insertion, please supply a CAD site plan in DWG format.

3. FILE NAMING

The file name should include the development name/address and date (YYMMDD) of submission. Eg. 12 Adelaide Tce_DA_090315

4. DETAIL LEVEL

The City requires only the external elements and surrounding forecourt for its Development application process. Internal fit outs are not required.

Please keep polygon counts as low as possible. If complex models with high polygon counts are to be submitted, please contact the City's 3D Model Coordinator.

5. LAYERS

Each building model should incorporate appropriate layer naming with clear naming conventions. **Glazing MUST be layered appropriately.**

6. TEXTURES AND MATERIALS

Ensure base material colours are used to represent the objects real world colour.

NOTE: If special treatments are to be applied to building facades, it is recommended to include these in the model submission to assist with the planning approval.

7. FILE FORMAT

All models submitted must be in the following file formats:

MAX ; 3DS ; DAE or DWG.

8. CONFORMANCE

It is the consultants responsibility that the model is complete and and represents the proposed development accurately. Best practice modelling techniques and layering standards should also be applied.

The City reserves the right to reject the model if it does not conform to the above standards. The City's 3D Model Coordinator will make all efforts to incorporate the submitted model into the 3D City Model simulator.

Models must be submitted at least 2 weeks prior to any Planning, Committee or Council meeting where the development will be reviewed.

HIGH DETAILED MODELS

At this stage, these models are not required, but may be in the future.

If special treatments are to be applied to building facades, it is recommended to include these in the model to assist with the planning procedure.

Note: Remember to include any textures with the DA Model

PLEASE NOTE:

- High resolution realistic still renders will still need to be submitted as part of the development application. Modellers will need to be aware during the model construction process to name all layers and materials appropriately to allow ease of detail control and exporting of various submission model files.
- Bump and Specular maps, Cameras, Lighting, Moving objects such as cars and people are not required for the development application models.
- Revit users, please setup an export template for future developments. The City is currently working on developing a template sample. Please notify the city if you wish to be included on the distribution list.

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CONTACT DETAILS

Technical enquiries can be made to:

3D Model Coordinator
City of Perth
27-29 St Georges Terrace
Perth 6001
(08) 9461 3159

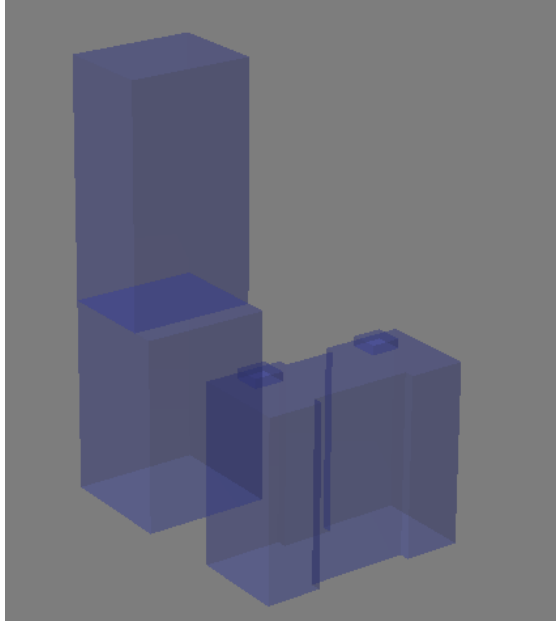
MODEL TYPE SAMPLES

The following images indicate the minimum level of detail required at the various stages of the planning application process.

BUILDING ENVELOPE MODELS

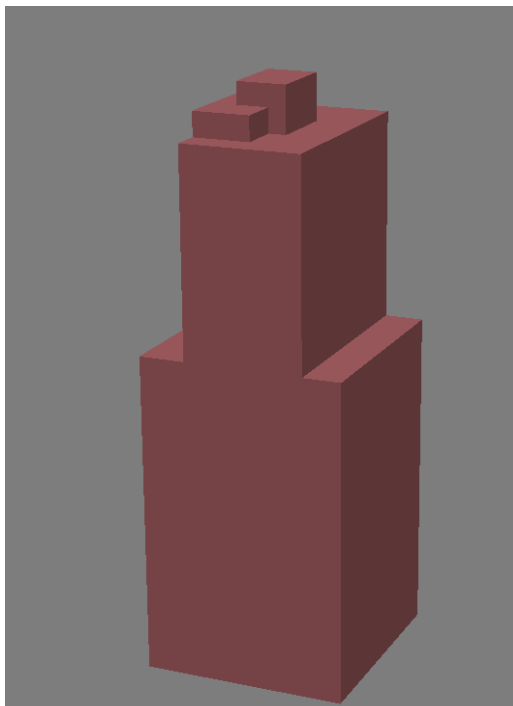
Based on the City Planning Scheme Heights.

Basic extruded blocks, no detail, transparency applied.



BULK / BUILT FORM MODELS - MINIMUM

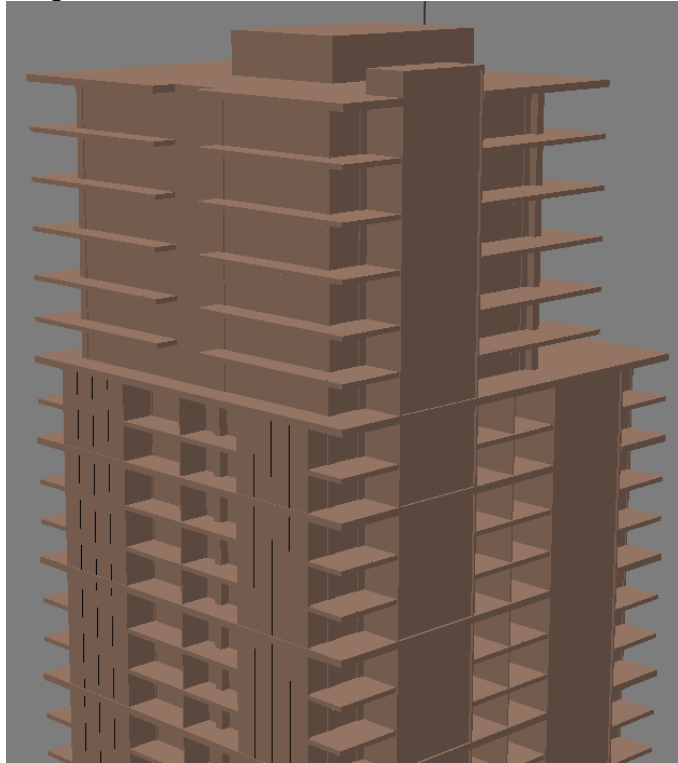
Basic extruded blocks with no detail



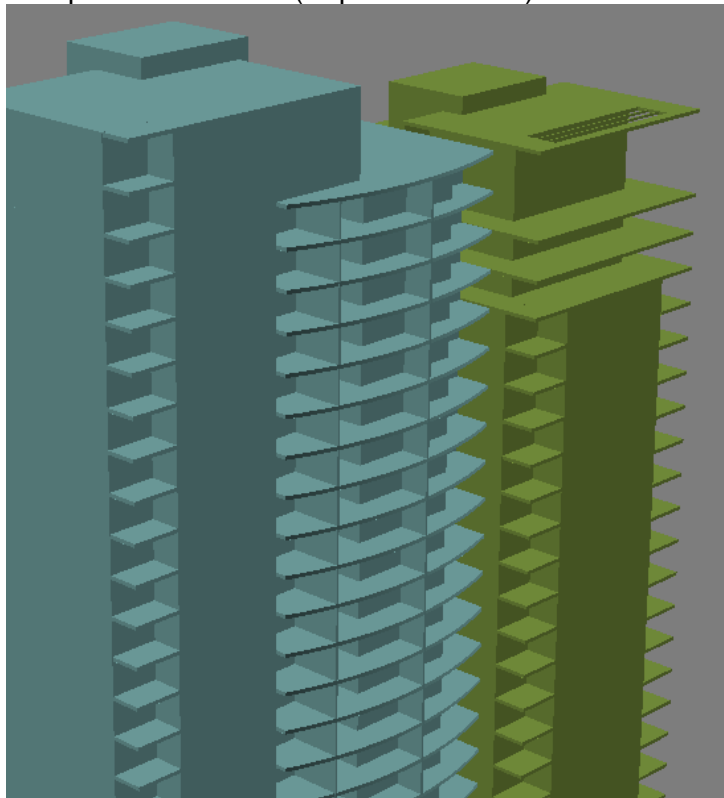
BULK / BUILT FORM MODELS - PREFERRED

Simple form model with some detail included.

Single Tower Model



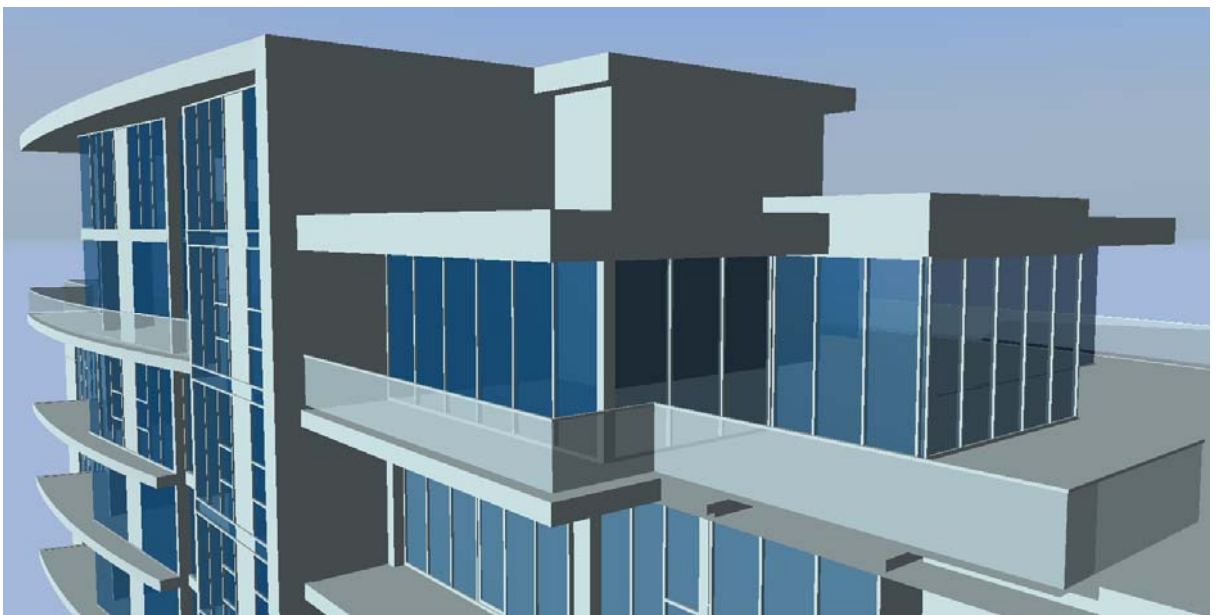
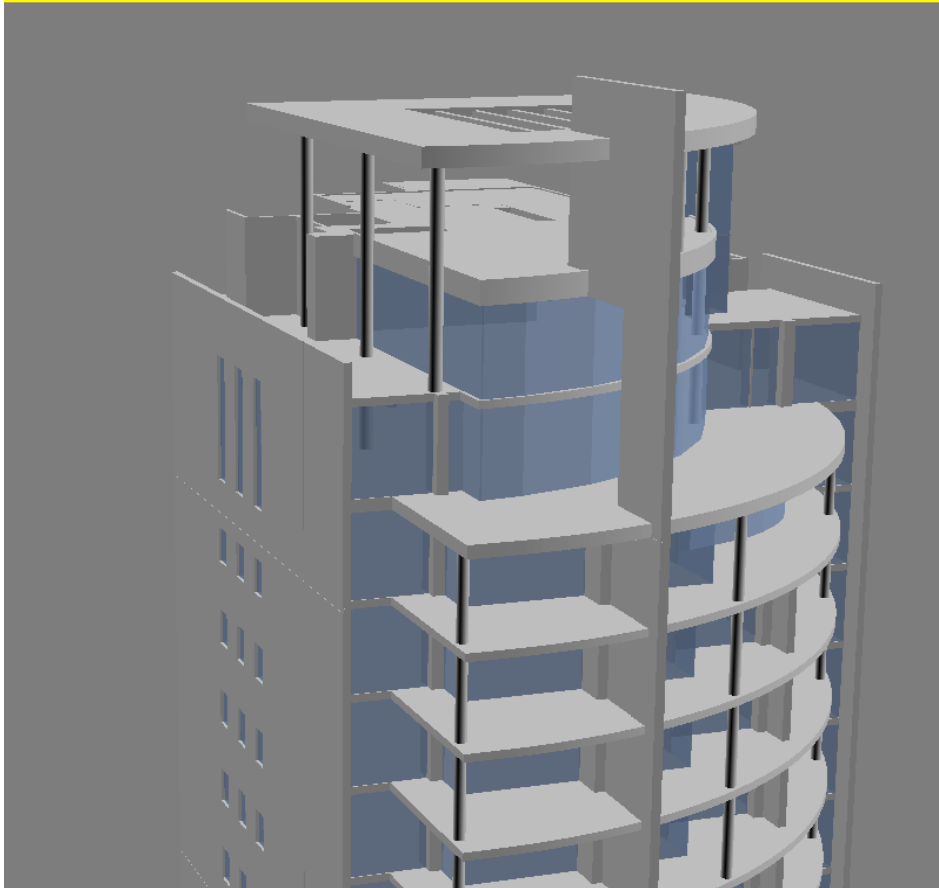
Multiple Tower Model (Separate colours)



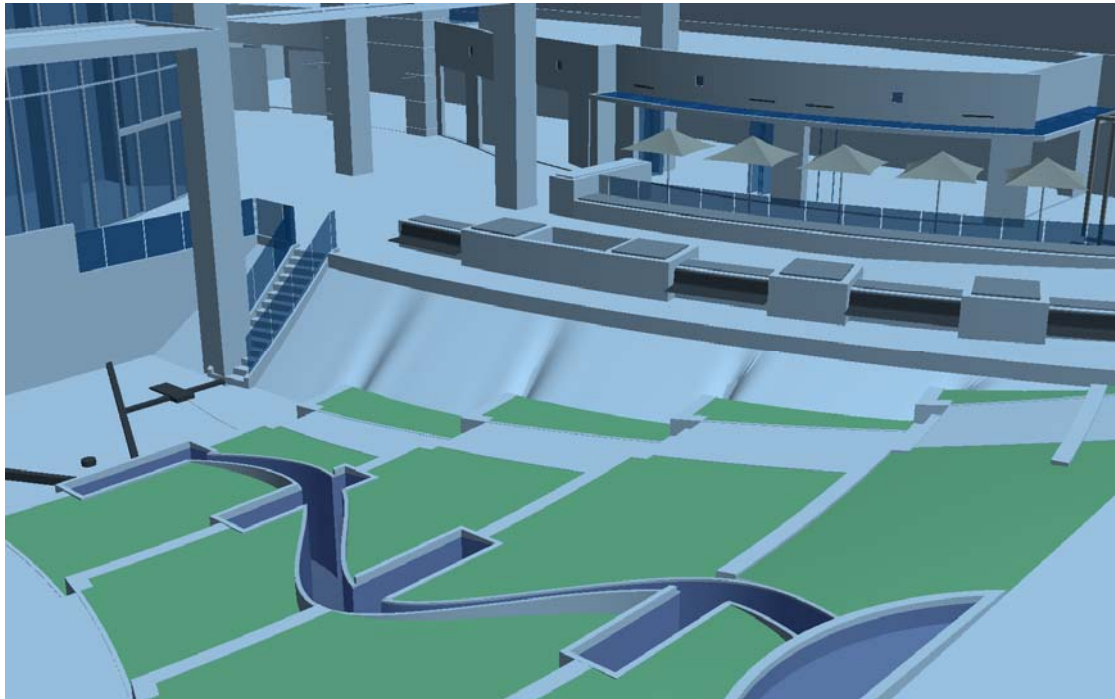
DEVELOPMENT APPLICATION MODELS

Multiple colours applied, Higher detail level, Glazing, Major visual elements included.

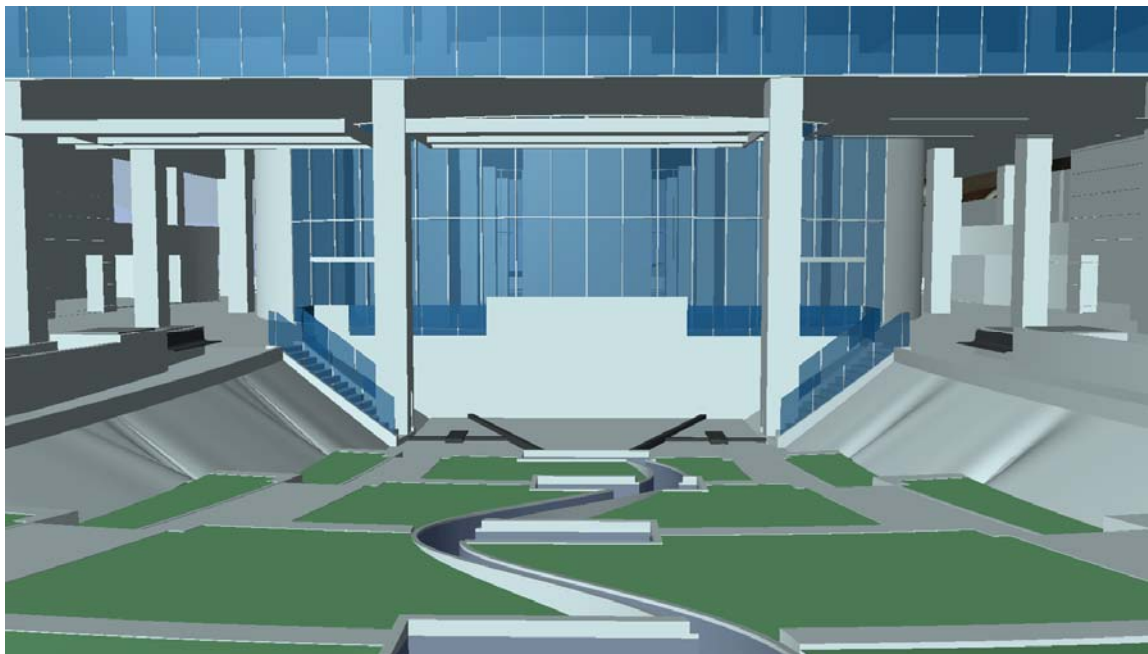
NOTE: Higher poly count models can be submitted, however please be sure to use clear layer naming and correct groupings. The model may need to be simplified further.



Forecourt objects to include seating, awnings, planter boxes and balustrade.
Objects such as seating can be shown as simple block forms.
Loose furniture such as umbrellas can be omitted.



Objects to have correct colours applied as a minimum standard.



Acknowledgments:

Several 3D models were kindly donated by SSChang Architects and Ellis Visualisations for use within this document.
Some sections from Textures/ Materials and Modelling Tips have been extracted from Simmersion's Modelling standards.