

# Revit Feasibility Site/Controls

#### Revit

#### Site and Massing Study

1: Site/Controls

2: Building Massing

3: Design Options

4: Scheduling Areas

5: Shadow Diagrams



## Dynamo

#### Site Analysis

5: Face Analysis Grids

6: View Analysis

7: Sun Hour Analysis

8: Analysis Refinement

9: Power BI Report



#### Power BI

Analysis and reporting

10: Power BI Report



## Planning Controls





## Planning Controls



Sydney DCP 2012 maps

The Sydney Development Control Plan 2012 applies to most of the City of Sydney local area. You can see more detailed maps about specific areas of the city.

View local sheet maps



## There's a LOT of them

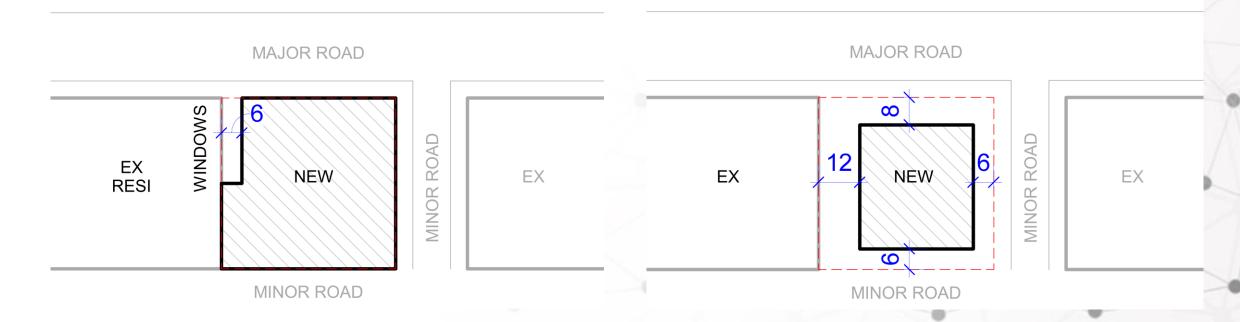
And it isn't the point of the series to cover them



#### Setbacks

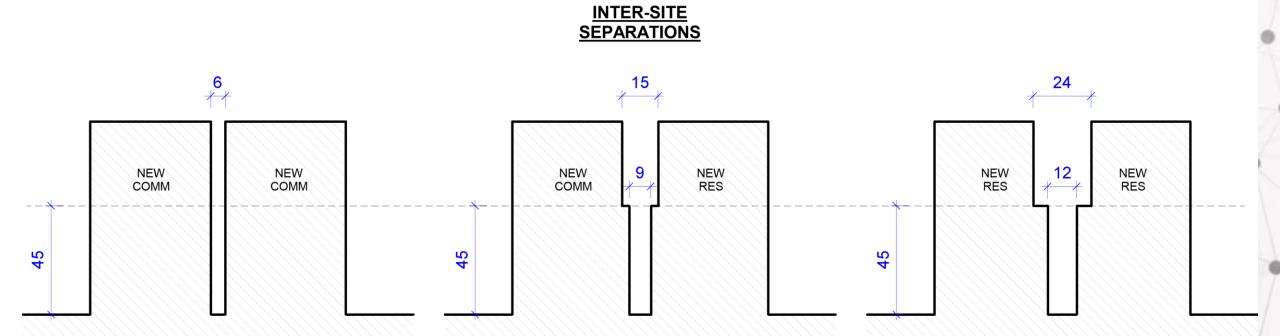
#### FRONTAGE LEVEL (20 to 45m) ANY RESIDENTIAL

#### ABOVE FRONTAGE (45m) ANY RESIDENTIAL



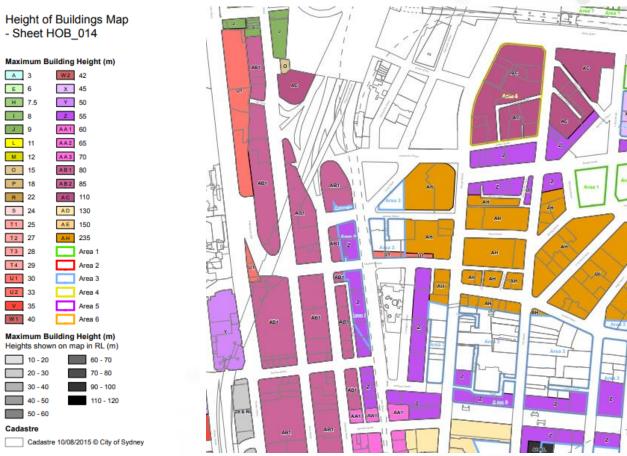


### Setbacks





## Height Limits





#### Sun Access Planes

#### (5) Belmore Park

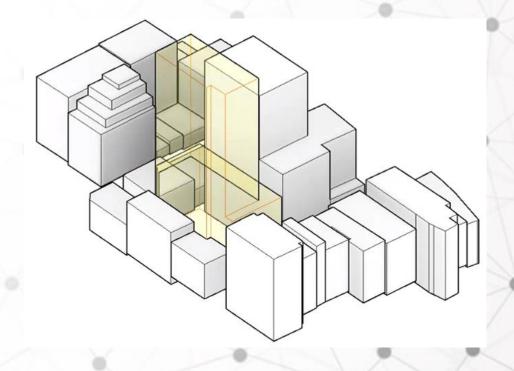
For the Belmore Park 1A sun access plane:

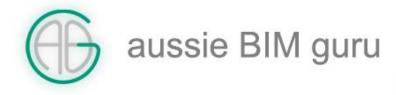
- (a) X is a point at 34067E, 49731N, 30RL, and
  - Note. Approximately 25 metres above the northern alignment of Hay Street 95 metres west from the junction of the northern alignment of Hay Street and the western alignment of Pitt Street.
- (b) Y is a point at 34297E, 49681N, 34RL, and
  - Note. Approximately 25 metres above the junction of the northern alignment of Hay Street and the western alignment of Castlereagh Street.
- (c) B is 359.0 degrees, and
- (d) V is 32.7 degrees.
- (6) For the Belmore Park 1B sun access plane:
  - (a) X is a point at 34115E, 49582N, 44RL, and
    - Note. Approximately 35 metres above the junction of the western alignment of Pitt Street and the northern alignment of Barlow Street.
  - (b) Y is a point at 34140E, 49622N, 43RL, and
    - Note. Approximately 35 metres above the western alignment of Pitt Street 45 metres north from the junction of the western alignment of Pitt Street and the northern alignment of Barlow Street.
  - (c) B is 328.6 degrees, and
  - (d) V is 25.6 degrees.



### The Workflow

- Obtain Site Model
- Process CAD file
- Partially model site
- Establish Ground Floor
- Model Controls





#### Site Models

Lots of options in *major cities* 

Accuracy/detail is key consideration

Instant CAD files for any location on earth.



Architects and urban planners use Cadmapper to save hours of routine drawing. It transforms data from public sources such as OpenStreetMap, NASA, and USGS into neatly organized CAD

It's free for areas up to 1 km<sup>2</sup> and over 200 whole city DXF

WORKS BEST WITH



AutoCAD



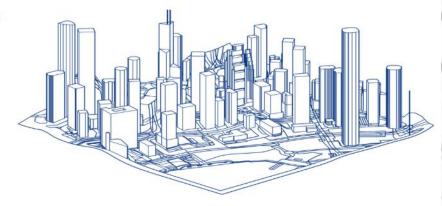
SketchUp 8+



Rhinoceros 5+



Illustrator







## Without further ado...

Let's get started...

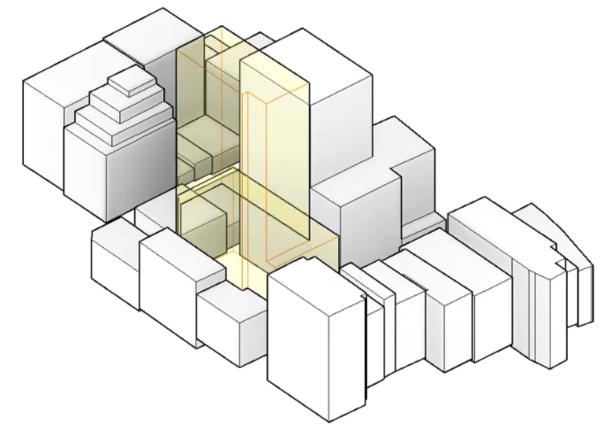


Next: Part 2

**Building Massing** 







# Revit Feasibility Site/Controls