



**LASER  
SURVEYS.**

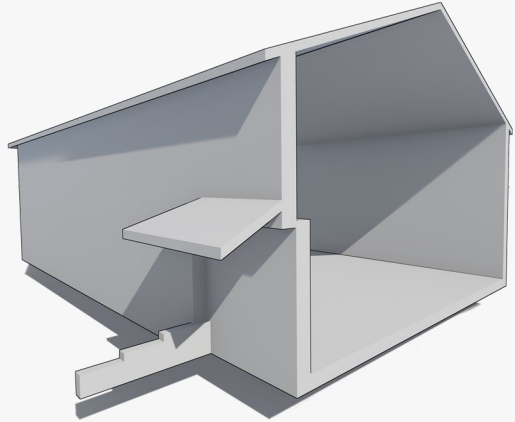
## **3D MODEL POCKET GUIDE**



# LOD—(Levels Of Detail) Building Models

## LOD 1—Massing Model

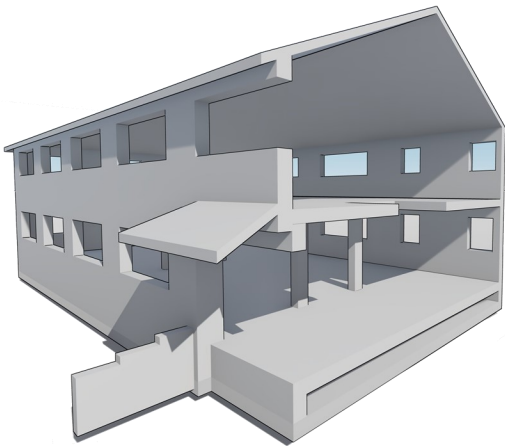
- Shows **approximate shape** of the external building envelope.
- Provides **height, width and depth** but no specific openings.
- **No** services or architectural features will be shown.



### SUITABLE FOR:

Buildings surrounding a site that may cover a large area, basic site massing in conjunction with a topographical model, buildings on a site that are not being developed but position & size needs noting.

## LOD 2—Outline Model



- Shows the **building mass** with only **key elements** in basic modelling:
- Door & Window **openings** (and other significant structural openings)
- **Stairs & ramps**
- **Primary structural elements:** beams & columns, floor slabs, walls, roofs
- **No detailed architectural elements** will be shown and no families modelled.

### SUITABLE FOR:

Right to light, buildings adjacent to site, intensive works where a record of existing buildings is required.

# LOD—(Levels Of Detail) Building Models

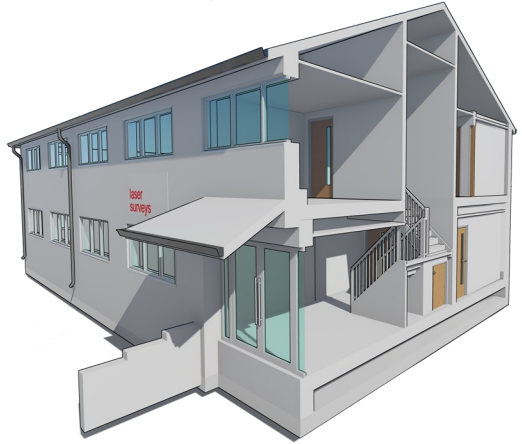


## LOD 3—Standard Survey Model

- As with the LOD 2 model, **also including standard architectural and structural elements.**
- Revit **standard families** will be used for elements such as: **doors & windows, stairs & ramps, railings, fixed furniture** (worktops, sanitary fittings, fixed shelving)

**Basic outline modelling** will be used for elements such as:

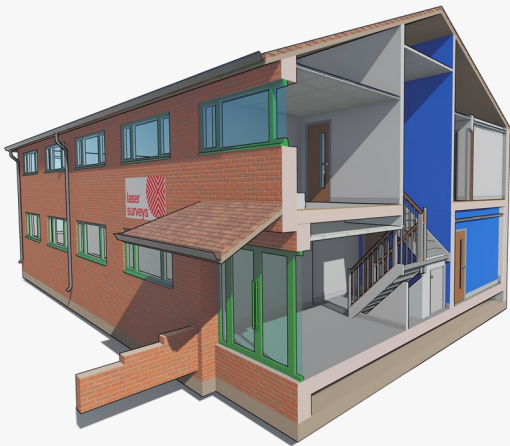
- **MEP** (Ducting, pipework, electrical panels etc. pipework shown at >50mm diameter only).
- Other **specific features must be requested** as part of the quote, and will be modelled in a **to LOD 2 as standard.**



### SUITABLE FOR:

Most building projects where substantial changes are planned.

## LOD 4—High Detail Survey Model



- As with the LOD 3 model, this model will contain **more detailed architectural and structural elements.**
- **Project specific families** will be used for elements such as: **doors & windows, stairs & ramps, railings, fixed furniture & architectural detailing** (e.g. architraves, mouldings)
- **Materials** (these will be Laser Surveys standard materials used as a representation only).
- **Other specific features** such as radiators, lighting, etc, **must be requested** as part of the quote, along **with LOD required.**

**Basic outline modelling** will be used for elements such as:

- **MEP** (see LOD 3 standard survey model).

### SUITABLE FOR:

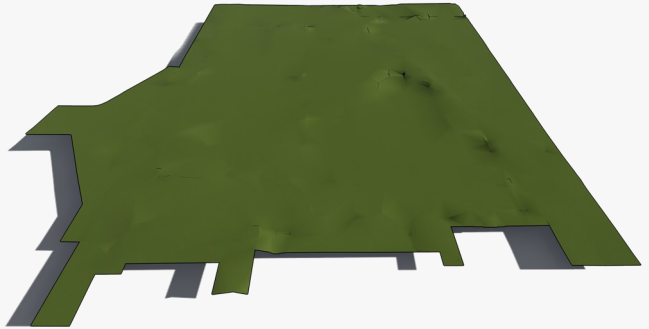
Listed buildings or projects where large amounts of the existing fabric are to be retained.

## LOD 1—Site Massing Model

- Shows the **basic toposurface**.
- Levels taken from **measured point level data** on site by our surveyors.
- **No specific regions** or elements will be identified.
- Often **used in conjunction with a building model** to show **wider context** or as a base for **clearer visualisation**.

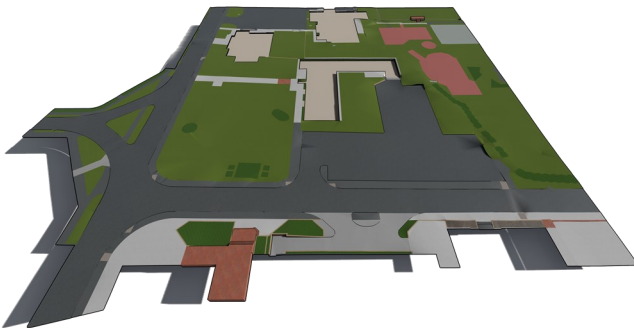
### SUITABLE FOR:

Large site areas where the building model is the focus but some context and height data may be required



## LOD 2—Outline Model (Subregions defined)

- Shows the **basic toposurface** for the site.
- Levels taken from **measured point level data** on site by our surveyors.
- **Split into subregions** to represent **changes in surface** (e.g. grass, gravel, concrete).
- Where kerbs and other notable **level changes occur the surface will be split** and tidied to **show the step clearly**.
- Where buildings are identified within the survey area a **building pad will be placed** to show **extent, shape and location**.
- **Materials identified will be Laser Surveys standard materials**, used as a **representation only**.



### SUITABLE FOR:

Most standard site models where general changes to the site are planned, for locating new projects within a site and for working on existing buildings that required slightly more contextual detail.

## LOD 3—Detailed Site Model

→ As with the LOD 2 model, **also including site features such as:**

*Steps & ramps, Lamp posts, Barriers, Fences, Walls, Trees & large elements of planting*

→ **Other street furniture** such as bins, benches and signposts will **only be shown if requested** at quote stage

→ All families shown will be **Revit standard families or Laser Surveys standard families.**

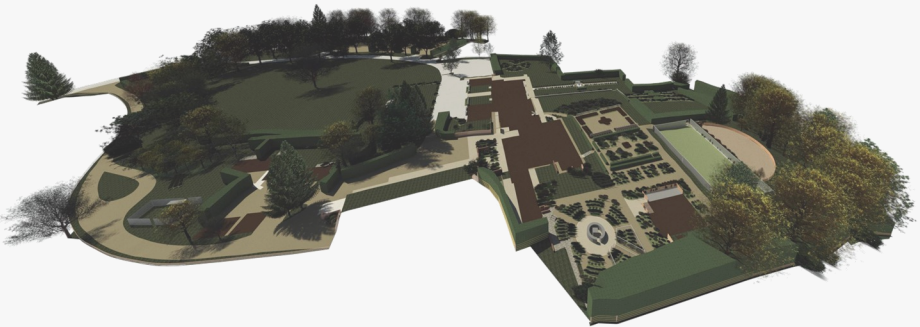
### SUITABLE FOR:

Most building projects where substantial changes are planned, or where a large amount of site elements need to be considered.



## LOI—(Levels of information)

*Please note that due to the projects being carried out generally being on existing buildings, the information included in the model families will only cover basic information (such as the model category, dimensions, location and type. We can include observations such as assumed material based on non-intrusive methods where required, but cannot comment on such things as construction build ups or structural integrity).*



## Further Information

Please see our full guide for more information on 3D services, or our [website](#) for information on all other services we provide.

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