Brisbane City Plan 2014
Interpretation guidance 01/2020

Basement vs Storey and Calculating building height in storeys

This interpretation guidance:

- clarifies what is a basement and what is a storey as they are applied to calculating building height in storeys for the purposes of assessing development under the *Brisbane City Plan 2014* (City Plan); and
- clarifies how Council calculates building height in storeys for the purpose of determining the category of assessment and for assessing development under the City Plan; and
- provides guiding principles in determining what may be considered an undercroft in a building as applied to calculating building height in storeys for the purposes of assessing development under City Plan.

Relevant Definitions within *Brisbane City Plan 2014*

Basement *means a space*
(a) between a ***floor level*** *in a building and the* ***floor level*** *that is immediately below it; and*
(b) no part of which is more than 1m above ground level.

Building height*, of a building, means—*
(a) the vertical distance, measured in metres, between the ground level of the building and the highest point on the roof of the building, other than a point that is part of an aerial, chimney, flagpole or load-bearing antenna; or
(b) the number of storeys in the building above ground level.

Ground level *means*
(a) the level of the natural ground; or
(b) if the level of the natural ground has changed, the level lawfully changed.

Storey
(a) means a space within a building between 2 floor levels, or a floor level and a ceiling or roof, other than—
(i) a space containing only a lift shaft, stairway or meter room; or
(ii) a space containing only a bathroom, shower room, laundry, toilet or other sanitary compartment; or
(iii) a space containing only a combination of the things stated in subparagraph (i) or (ii); or
(iv) ***a basement*** *with a* ***ceiling*** *that is not more than 1m above ground level; and*
(b) includes—
(i) a mezzanine; and
(ii) a roofed structure that is on, or part of, a rooftop, if the structure does not only accommodate building plant and equipment.

‘Basement’ vs ‘Storey’

Step 1: Is there a basement?

‘Basement’ is defined as a space within a building where that space is between a floor level and the floor level immediately below and at no point exceeds 1m above ground level. Refer to Figure 1.

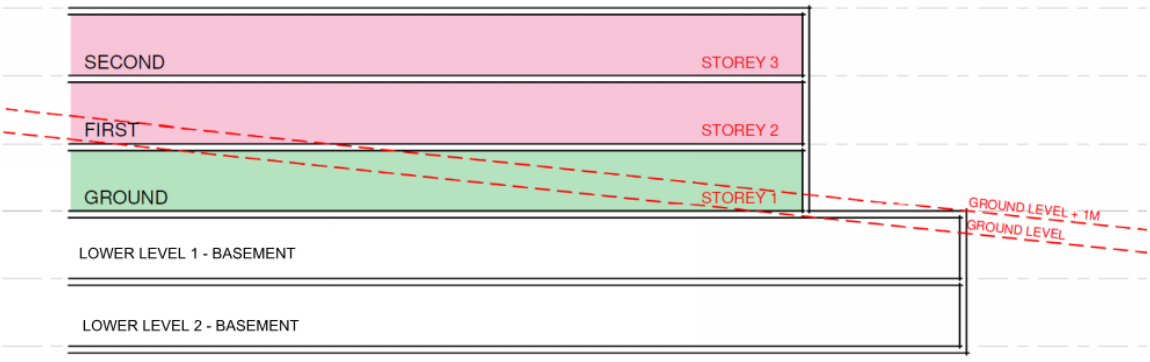

Figure 1 – No part of ‘Lower Level 1’ level exceeds 1m above ground level and is therefore a basement

Step 2: Where is the first ‘Storey’?

The definition of ‘Storey’ is a space within a building between two (2) floor levels or between a floor level and a ceiling or roof.

The definition also identifies four (4) specific exclusions. Of note ‘*(iv) a basement with a ceiling that is not more than 1m above ground level’* will not constitute a storey (refer to Figure 2 below).

Where a level has a ceiling greater than 1m above ground level, the entire level constitutes a ‘Storey’ (refer to Figure 3 below) and becomes the first storey in its entirety in the calculation of building height in storeys.

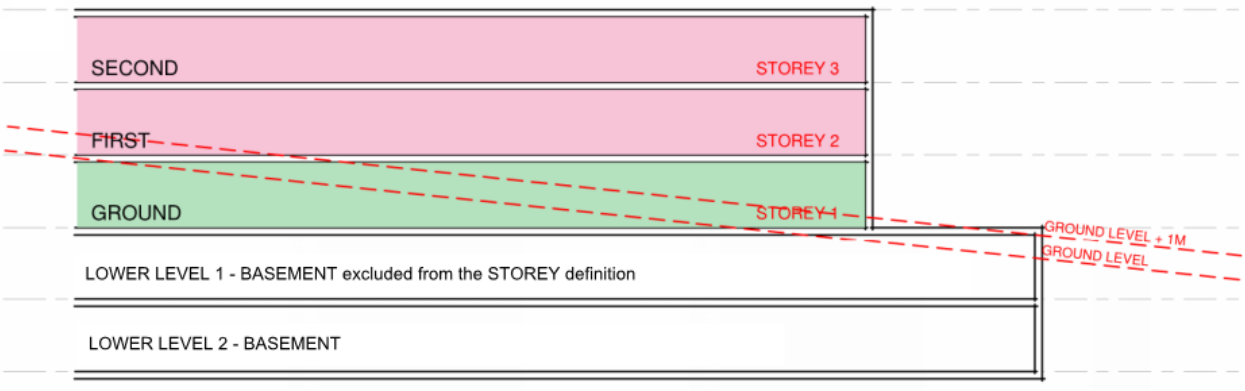

Figure 2 – Ceiling of Lower Level 1 does not protrude more than 1m above ground level and is therefore excluded from the definition of ‘Storey’, however the Ground Level is the first storey in its entirety

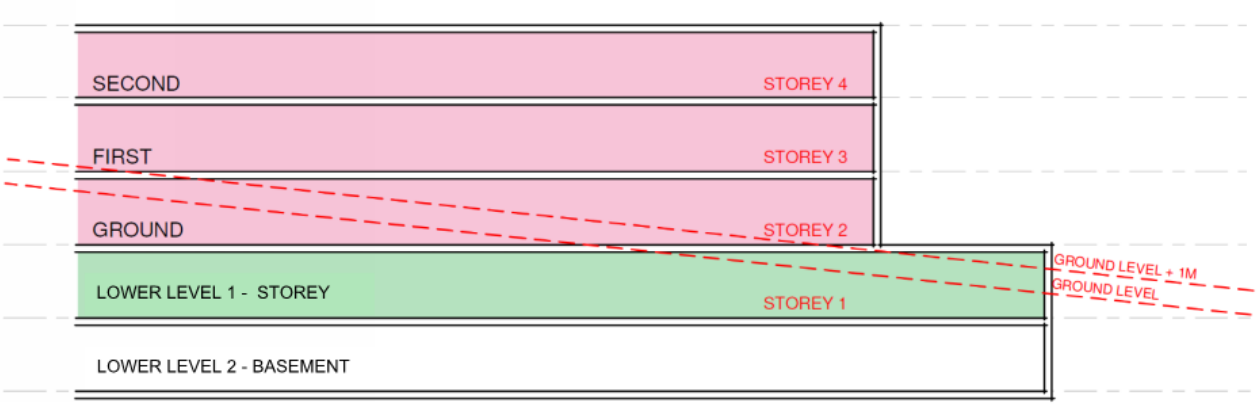

Figure 3 – Ceiling of Lower Level 1 protrudes more than 1m above ground level and therefore entire level is the first Storey

NOTE 1: *Where there is cross fall on the site, detailed plans are required to determine whether a level protrudes more than 1m above ground level at any point (e.g. multiple cross sections at different points across the site, and/or a plan showing the finished ceiling level expressed as a reduced level (RL) overlaid as a dashed outline on the site contour plan).*

NOTE 2: *If a space is determined not to be a 'Basement' under this definition, it does not necessarily mean it constitutes a 'Storey', as there are four (4) exclusions contained within the definition of 'Storey' (refer to definition of 'Storey' above).*

NOTE 3: *A building cannot have a level constituting part' 'Basement' and* part *'Storey'. Where any part of a level exceeds 1m above ground level, the entire level is a 'Storey'.*

NOTE 4: *Being a 'Storey' does not necessarily mean that the 'Storey' contributes to Building Height.*

Calculating Building height in storeys

NOTE: *This interpretation guidance is for calculating building height in storeys only. Overall height in metres, measured from ground level at any point, must also be considered when calculating building height. A neighbourhood plan may also specify height in metres above natural ground level.*

Calculating Building height in storeys

When calculating building height in storeys, it is important to understand the difference between a 'Basement' and a 'Storey'. Levels identified as 'Basement' are excluded from the calculation of overall building height.

Once it has been determined whether the *entire level* constitutes either 'Basement' or 'Storey', the calculation of 'Building height' in storeys can be undertaken.

Building height is calculated by determining how many storeys are vertically above ground level at any point (refer to definition of 'Ground level' above).

One common mistake in calculating 'Building height' is to use the 1m above ground level qualifier (used when determining whether a level is a 'Basement') to calculate the building height at a relative point across the site. The 1m above ground level is only used to determine whether the entire level is 'Basement' or 'Storey'.

In particular circumstances it is possible for a level that is a 'Storey' not to contribute to Building height above ground level. Refer to Figure 4.

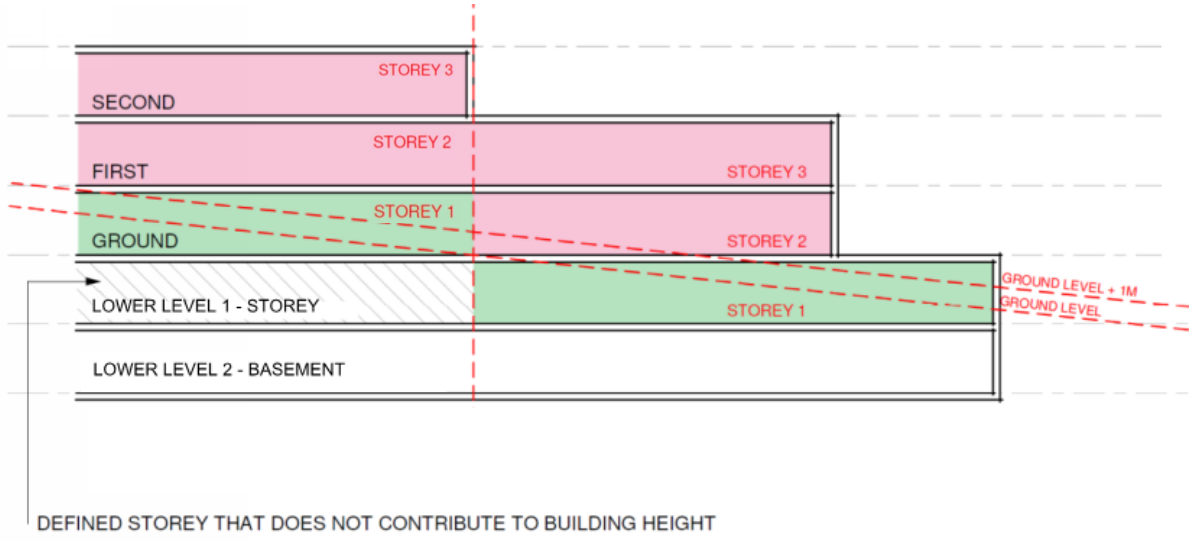

Figure 4 – Example of calculating building height where 'Lower Level 1' level is a 'Storey'. Building height in this example does not exceed 3 storeys above ground level at any point. Note- part of 'Lower Level 1' (hatched) does not contribute to building height above ground level.

Determination of Maximum Building Height

When calculating the Building height for development where a maximum building height is specified in storeys in a table of assessment or a code, reference must be made to s1.7.7 of the City Plan – 'Determination of maximum building height'.

Section 1.7.7 (2) states:

> *The specified number of storeys for the development is reduced by 1 storey if the development includes a space that is situated between one floor level and the floor level next above, or if there is no floor above, the ceiling or roof above, that contains only a bathroom, shower room, laundry, water closet or other sanitary compartment.*

A common circumstance to which this provision applies is a rooftop recreation area that incorporates a water closet and/or shower room.

Undercroft and Storey

What is an undercroft?

An undercroft will vary in form depending on the individual attributes and constraints of each site. An undercroft is generally considered to constitute the space between ground level and the floor of the building above that is relatively open to the sides, but covered by the building above. Refer to Figure 5.

In most circumstances, an undercroft is required to achieve an accepted level of flood immunity or to provide built form transitions due to topographical variations. Refer to Figure 6 and 7.

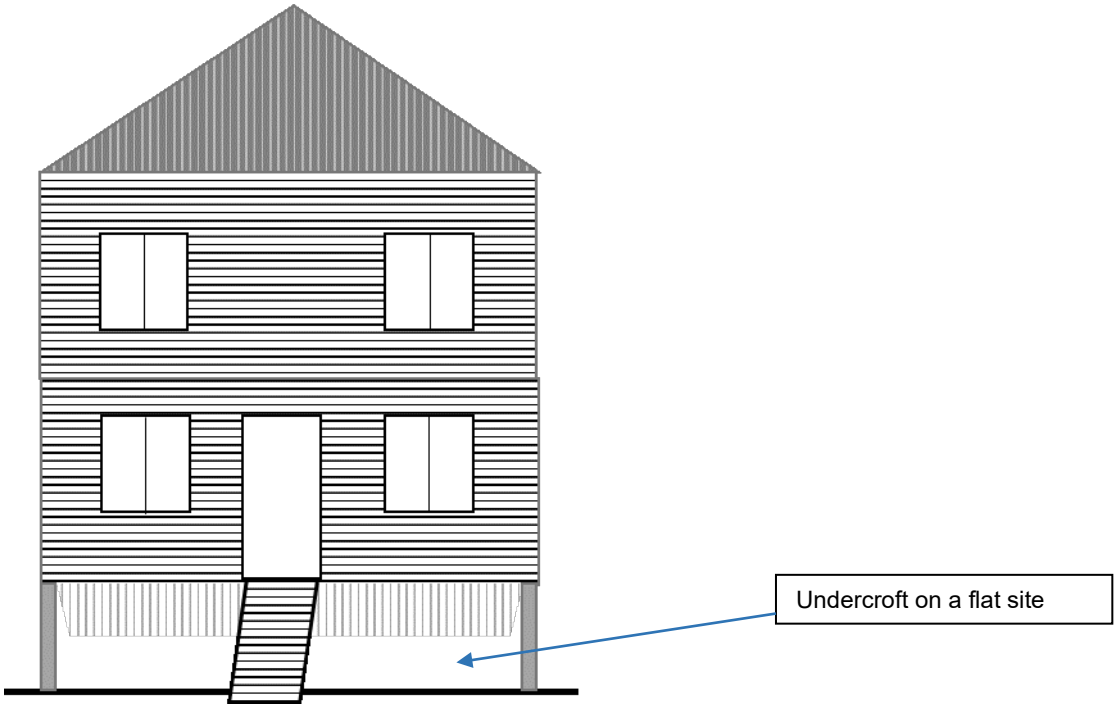

Figure 5: Example demonstrating undercroft on a flat site

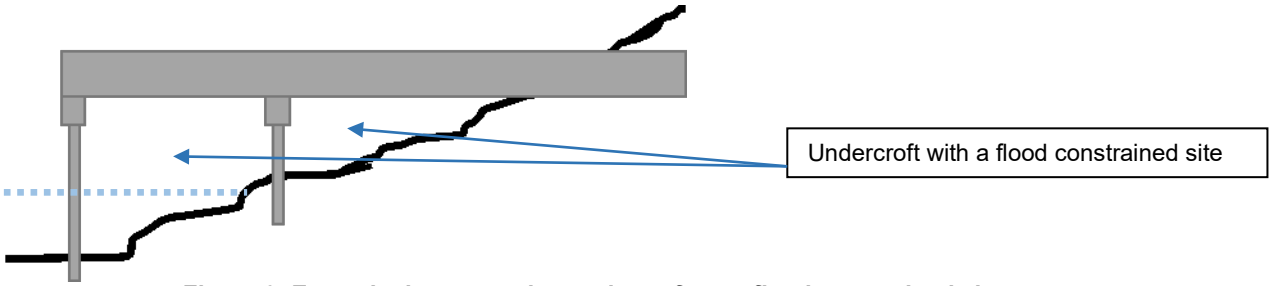

Figure 6: Example demonstrating undercroft on a flood constrained site

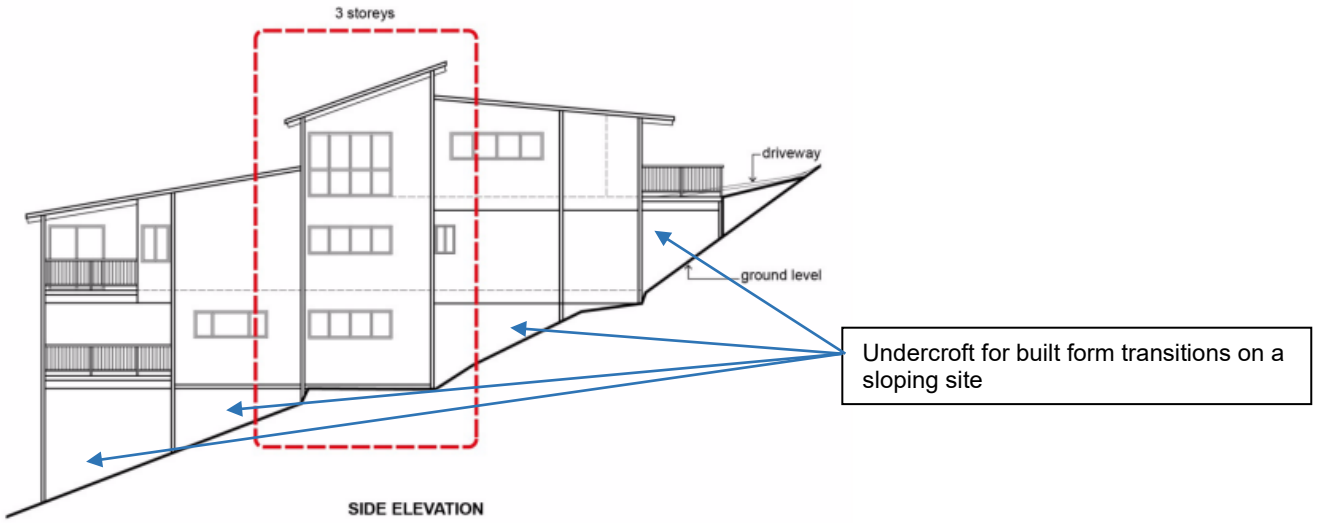

Figure 7: Example demonstrating undercroft on a sloping site

Undercroft and Storey

An undercroft may contribute towards the number of Storeys in a building. However this depends on all of the individual circumstances. The contributing factors Council may consider when determining if an undercroft constitutes a Storey include:

- whether the undercroft is wholly or partly enclosed;
- the degree to which it is located within a building footprint;
- the ground treatments, including whether it has a finished floor;
- the height of the space; and
- accessibility.

More information

Phone Council on 07 3403 8888 and ask to speak with a Planning Information Officer.