

RETAINING WALL DESIGN PARAMETERS

AND PERMISSIBLE WORKS ADJACENT



While the topography of Gainsborough is quite flat, there are some areas with reasonable grade changes that require retaining to reduce building costs and maximise usable areas of your land.

When designing retaining walls Mirvac prefer the use of either:

- Boulders, usually for areas facing the street or public areas to maximise street appeal and property values, or
- Concrete sleeper walls to minimise the impact the structure has on useable land and to reduce maintenance costs because of the robust nature of concrete.

As these retaining walls are contained within private property the land owner owns them and has a responsibility to monitor and maintain the retaining walls. While they are generally contained within the lower allotment, the upper allotment owner also shares an obligation to not adversely affect the walls structural integrity. The following information is provided to assist all homeowners and their builders.

The retaining walls have been designed in accordance with:

- All relevant Australian Standards
- Applicable Gold Coast City Council approvals
- A 5k Pa surcharge loading above the retaining wall
- Maximum 1 in 10 back slope above concrete sleeper retaining wall
- Existing site soil properties.

In order to avoid adversely affecting the structural integrity of the retaining wall each land owner has a responsibility to ensure the following (including making builders or tenants aware):

- That works adjacent to the retaining wall structure complies with the design parameters noted above
- That no open excavations, alterations or modifications are permitted within the zone of influence without Engineering assessment. Refer to sketch for definition of 'zone of influence'
- That no structures or trees are installed within the zone of influence (both above and below the retaining wall) without Engineering assessment

- Water is not permitted to pond within the zone of influence above or below the wall
- Any site works within any individual allotment must not disrupt the wall drainage including limiting discharge from the retaining wall
- No machinery is to be used above the retaining wall where it would result in a load more than the 5kPa limit noted above as this may cause deformation of the wall components
- The wall height is not to be raised by any method, including bolting on or constructing an additional retaining wall above, without obtaining an Engineering assessment of the effects on the wall.

Installation of a solid 1.8m boundary fence on or adjacent to the wall (depending on boundary location and/or agreement with neighbour) is acceptable provided the consideration given to the items raised above. As with all fences, design and construction of the fence is the owner's responsibility.

ZONE OF INFLUENCE

The following information is provided as a general guide.
If you are unsure you should consult with a suitably qualified engineer to confirm the actual extent of the zone of influence.

For example, if the wall height, H, is 1.6m then:-

For the Lower Lot the Zone of Influence extends from the base of the wall for $H \times 1.25$ or $1.6 \times 1.25 = 2\text{m}$

For the Upper Lot the Zone of influence extends from the base of the wall for $H \times 2.25$ or $1.6 \times 2.25 = 3.6\text{m}$

