



STORMWATER DETENTION REQUIREMENTS FOR RESIDENTIAL DEVELOPMENT

This information leaflet will explain Council's requirements for stormwater detention for residential development. It will also explain the level of information regarding stormwater required by Council in a development application.

Why is stormwater detention necessary?

The requirement to detain stormwater on-site has arisen from the increase in the number of dwellings within the Council area. This increase in density, as well as house sizes, is resulting in more hard surfaces requiring drainage into Council's draining infrastructure.

- detention tanks (similar to 3-module rainwater tanks*);
- underground holding tanks;
- surface holding areas.

Council does not accept soakage pits/trenches or other similar methods as a means of disposal of stormwater.

What are Council's requirements?

Council's stormwater detention requirements apply to dwellings proposed on allotments under 500 square metres in area (refer to Council's Development Plan).

Each dwelling must detain a minimum of 2000 litres (2 cubic metres) of stormwater from the roof area of each dwelling. A minimum of 60% of the roof area of each dwelling must be directed through the detention system, with a maximum outflow rate of 3 litres per second.

In developments with large amounts of hard surfaces (such as shared driveways and parking areas), additional detention for those surfaces may also be required.

As well as stormwater detention from roof areas, you must ensure that all water from the land (such as paved areas, driveways etc) drains to the street.

How can you achieve the detention requirements?

A qualified engineer should design the stormwater detention system. There are numerous options that can be used in achieving Council stormwater detention requirements. However, the following techniques are most common:

* Detention tanks are designed to be empty. If you would also like to utilise these tanks as rainwater tanks, it will be necessary for them to be larger in capacity than 2000 litres.

What is a stormwater detention tank?

A stormwater detention tank 'detains' or slows the release of stormwater from your property through the provision of on-site storage. It is important to note that a detention tank only *slows down the rate of flow* from your property compared to a rainwater tank that *stores* stormwater.

Your stormwater detention tank is supposed to be empty except during periods of rainfall and for a short duration after the rainfall ceases.

The tanks are based on standard 2 or 3 module rainwater tanks that are modified to include a 90mm outlet with an inspection opening and a 30mm outlet restriction orifice.

Can I Use My Stormwater Detention Tank For Collecting and Storing Rainwater?

A detention tank works differently to a retention tank. The detention system relies on the tank being empty at the start of a storm, therefore it

cannot be used for rainwater storage without modifications.

Council's preference is to have an additional tank or a tank of large capacity (over and above the required 2000 litres) to accommodate both the detention and retention requirements.

Where space available for the installation of a tank is limited, Council will consider any design from a qualified engineer to modify the detention tank and use it as a dual purpose tank. In that case however, the tank has to be designed to

satisfy Council's requirement for reducing the peak flow.

How Do I Get My Stormwater Detention System Approved?

Details of your on-site stormwater detention system will be assessed as part of a planning consent (development application) for your dwelling. Therefore it will be necessary to lodge a site plan showing the following with any application for dwellings:

- existing and proposed site levels and finished floor levels;
- existing kerb and water table (gutter) levels;
- proposed sump levels (if applicable);

How Do I Maintain My Stormwater Detention Tank?

Maintenance is relatively easy. It is simply a matter of opening the inspection cover and checking to ensure that the orifice plate has not become blocked. Periodic checks and cleaning of the leaf guard are also required.

The largest rainfall events occur during the summer months; therefore, it is important that the tank is maintained all year round.

- location of downpipes feeding into the detention system;
- area of roof directed into the detention system.

The provision of stormwater detention information with your dwelling application will ensure a faster approval process.

Further Information:

For further information about Council's stormwater requirements for residential development please contact the Planning Section on 8366 9228.

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