



ON-SITE STORMWATER DETENTION POLICY

DEFINITIONS:

1. Applicant: Developer, Contractor or Owner.
2. Average Recurrence Interval (ARI): The statistically generated average time interval between recurrences of an event. For example a 100 year ARI storm has an intensity that would occur, or be exceeded, on average once in 100 years.
3. Catchment: The land area draining to a particular point.
4. Discharge: The rate of flow of water expressed as volume per unit time (i.e. litres per second)
5. Flood: A relatively high flow of water that has overtopped stream banks or artificial channels and/or local overland flooding associated with major drainage systems being inadequate to convey all flow.
6. Floodplain: An area of land subject to inundation by floods.
7. On-Site Detention (OSD): Refers to the temporary of storage of stormwater for short periods to reduce the peak flows. An OSD system ensures that peak flows from a site are not increased after development.
8. Runoff: The amount of rainfall which does not infiltrate into the soil, resulting in the presence of surface water.
9. Stormwater system: Comprises all components of stormwater infrastructure, both artificial and natural, whether that be above or below ground (e.g. pipes, surface flowpaths, culverts, roadways, kerb and gutter)

LEGISLATIVE REQUIREMENTS

NSW State Legislative Requirements are:

- Environmental Planning & Assessment Act, 1979 (EP&A Act)

- Protection of Environment Operations Act, 1997
- The Drainage Act, 1939
- River & Foreshores Improvement Act, 1948
- Soil Conservation Act, 1938
- The Local Government Act, 1993
- Catchment Management Act, 1989
- Fisheries Management Act, 1994
- Actions at Common Law

PURPOSE/OBJECTIVE

The purpose of this policy is to:

1. ensure that there is no adverse impact from stormwater runoff on downstream properties as a result of development in the catchment for all storm events up to and including a 100 ARI event.
2. ensure on-site stormwater detention systems are incorporated into design to provide temporary storage of stormwater runoff from developments and restrict discharge from the site at a rate which Council's existing drainage system is capable of accommodating.

POLICY STATEMENT

1. This On-Site Stormwater Detention (OSD) Policy shall be read in conjunction with Liverpool City Council's:
 - Floodplain Management Plan,
 - On-Site Stormwater Detention Technical Specification, and,
 - Development Design and Construction Specifications (as amended)
2. OSD shall apply to all developments where any of the following situations occur:
 - Where there is an existing stormwater system that is unable to cater for the increase in discharge due to development;
 - When the development will involve an increase in impervious area on the site.
 - Where it is intended to connect stormwater directly to the street kerb and gutter only and the discharge for the 1:10 year storm exceeds 20 litres per second for the 1 in 10 year ARI.

Calculations shall account for the total development site area. Types of developments where OSD may be applicable include (but are not restricted to) multi unit/dwelling residential development, single dwelling additions, dual occupancies, industrial and commercial developments and redevelopment of

lands where Council feels the development is likely to produce increase in stormwater runoff and adverse impacts to the neighbouring properties.

3. OSD will not be required where it can be shown that:

- the increased discharge for all storms up to and including a 100 year event can be accommodated by the existing stormwater pipe system; or
- a building addition or internal alteration is within the footprint (plan area) of the existing building; or
- the additional impervious surfaces (e.g. roof, driveway, paving) total is less than 30 square metres in plan area. (NOTE: the designer is advised to confirm with Council engineer first to ensure that the cumulative total of previous and future additions still remains less than 30 square metres, otherwise OSD will apply); or
- the sub-division of an existing development does not change the buildings or the impervious areas of the site.
- Sites substantially inundated by flooding. (This is to be confirmed by Council's engineer)

4. The on-site stormwater detention system must be designed, constructed and maintained in accordance with the requirements of Council's OSD Technical Specifications.

5. The cost of all survey, design and implementation of the On-Site Stormwater Detention System required by this policy shall be borne by the applicant.

AUTHORISED BY

Council Resolution

EFFECTIVE FROM

Date of Council Resolution

DEPARTMENT RESPONSIBLE

Assets and Infrastructure

REVIEW DATE

Annually from date of Council Resolution (date)

THIS POLICY HAS BEEN DEVELOPED IN CONSULTATION WITH

This policy has been developed in consultation with relevant staff from across Council's Departments of:

Assets and Infrastructure.
Operations.
Community and Environmental Planning.

REFERENCES

1. Liverpool City Council's Floodplain Management Plan (December 1987 as amended).
2. Liverpool City Council's On-Site Stormwater Detention Technical Specification.
3. Liverpool City Council's Development Design and Construction Specifications (as amended).