Performance Criteria		Acceptable Solutions	
P4	To ensure that the use of onsite stormwater detention (OSD) is appropriate the needs of the development including: • Post development peak flow should match as closely as possibly pre-development peak flow. • OSD measures are made safe. • The development does not place an unacceptable financial burden on landowners or the community. • OSD designed in accordance with industry standards.	A4.1	OSD is to be sized to match pre-development peak flow rates for the 5, 20 and 100 year ARI rain events for that site.
		A4.2	For development other than subdivision, pre and post-development peak flow calculations must be based on the impervious percentages (as outlined below) or the actual impervious surface area (whichever is greater) as detailed on development plans.
		A4.3	For subdivisions, pre and post-development peak flow calculations must be based on the impervious percentages as outlined below. Area impervious: • Open Space – 25% • Normal residential – 60% • Half width road reserve – 95% • Medium density residential lots – 80% • Commercial areas – 90% • Industrial areas – 80%
		A4.4	OSD design must consider downstream boundary conditions for the 100 year ARI level of the receiving water.
		A4.5	Detention storage must be located at a level above the 5 year ARI flood level.
		A4.6	If OSD is provided in landscaped areas, the desirable maximum depth of ponding under design conditions is 300mm, this can be increased to 1200mm provided that site slopes of the basin are ≥1:6, or the provided storage is fenced off.
		A4.7	For subdivisions it is recommended that OSD is at the individual dwelling scale. Where OSD is proposed on public land, the OSD system must be kept to a minimum.
		A4.8	50% of any retention volume can contribute towards the OSD volume required for the development, provided the systems are interconnected.

Note: Peak flow is the maximum instantaneous outflow from a catchment during a storm event.