

# Design Standards for Industrial Developments



## **Engineering Services**

#### **Industrial Lots Stormwater Management**

It is a requirement that storm water is retained on site suitable to accommodate a 1 in 5 year rainfall event (6 minute duration). Overflow storm water must be directed towards Council's road network or drainage system. Ideally, stormwater shall be piped into the existing drainage system. It is not permitted to allow overflow towards neighboring properties.

Stormwater treatment facilities in form of a petrol oil trap(s), sediment strap(s) or gross pollutant trap(s) shall be provided to prevent discharge of pollution to the surround environment and water ways.

Applications will be assessed on a case by case basis.

Several options are available for onsite storage of storm water including, but not limited to:

- Soakwells note that you must consider soil types and design accordingly
- Within landscaping treatments
- Retention basins
- Recycling systems

The Town recommends that the developers consult with an engineer to review their options.

Several options for controlling overflow storm water include, but are not limited to:

- Provide sufficient fall across the site to allow overflow to be directed to the road network or Council's drainage system
- Design a piped system to connect to the road network or Council's drainage system. This may require pumping the storm water if levels are insufficient



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Table below is the Town's drainage calculations which will assist the developers in formulating their drainage requirements.

### **Soakwells Option**

Standard Drainage Calculation for Residential Lots - This example is based on 1m<sup>2</sup>

Co-Efficient of runoff (C)= Covered Area			0.85		
(A)=			1	m <sup>2</sup> mm/hr ( 6mins duration, 1in5yr	
Rainfall Intensity (I)=		152 0.152	storm) m/3600sec		
Q =CIA	0.000036	m <sup>3</sup> /sec			
t= 6mins	360	secs			
Volume = Qt =	0.013	$m^3$	need to I	be retained on site based on 1m <sup>2</sup>	

#### Soakwells Available

	Capacity	
Size: dia x high	(m <sup>3</sup> )	Number required
1200x900 mm	1	
1200x1200	1.36	
1800x900	2.29	
1800x1200	3.05	
1800x1800	4.58	