

<b>Responsible Directorate</b>	<b>Infrastructure</b>
<b>Responsible Business Unit/s</b>	<b>Engineering Design</b>
<b>Responsible Officer</b>	<b>Manager Engineering Design</b>
<b>Affected Business Unit/s</b>	<b>Engineering Operations Development Services Facilities, Projects and Assets Parks and Sustainability</b>

## Objective

This policy provides guidelines to effectively control and manage stormwater runoff from land under the care, control or management of the City.

## Scope

This policy applies primarily to the disposal of stormwater runoff from the City's road network comprising local roads, local distributor roads and district distributor roads.

This policy also applies to the disposal of runoff from certain other land under the care, control or management of the City, including car parks and public open space.

This policy excludes the disposal of runoff from City buildings and private property, the drainage of which is the responsibility of the owners of the land and shall be accomplished by use of reinforced concrete soak-wells in accordance with the requirements of the Development Services Business Unit.

## Policy

Within the provisions of the City's current design criteria, and taking into account the predictable storm recurrence interval, The City shall control and dispose of stormwater runoff from land under its care, control and management to ensure that runoff causes no flooding of roadways or damage to private property.

The City does not contribute toward the cost of any fence which divides privately owned land and adjoining land held by the City for a public purpose except that the City shall contribute toward the cost of a dividing fence separating private land and a drainage basin.

The City allows for several methods of disposal of stormwater runoff that shall be designed and implemented to the satisfaction of the Director Infrastructure.

### 1. Drainage Sumps and Fencing

- 1.1. Drainage retention basins, commonly referred to as drainage sumps, shall consist of an area of land capable of retaining a designed discharge of water in such a manner as to allow it to infiltrate to the ground water table without causing damage or undue inundation to adjacent land.
- 1.2. All drainage sumps shall be fenced in such a manner as to prevent the entry of children.

- 1.3. A strip of land a minimum of 1 metre in width must be supplied around the perimeter of a sump fence such that landscaping may be supplied when seasonal conditions allow. All landscaping shall be to the satisfaction of the Executive Manager - Works.
- 1.4. Drainage sumps shall have a maximum side slope equal to the angle of repose of the natural soil unless design criteria demand a shallower slope. A berm width of 2.0 metres shall be provided between the top of the sump side slope and the fence. Vehicle access gates and ramps shall be provided to the satisfaction of the Director Infrastructure to enable ongoing maintenance access to the sump.

## **2. Underground Sumps**

- 2.1. Underground sumps shall be implemented only at the direction of the Director Infrastructure.
- 2.2. Underground sumps shall be considered only where no viable alternative exists - i.e. where the ground surface required for a conventional open sump must be available for other activities and the stormwater runoff does not have an alternative outlet.
- 2.3. A suitable stormwater pollutant trap shall be provided between the last stormwater entry point to the pipe drainage system and the inlet to the underground sump.
- 2.4. Individual designs for underground sumps shall be to the satisfaction of the Director Infrastructure.

## **3. Recharge Bores**

- 3.1. Recharge bores may be used where an isolated pocket of stormwater runoff may not be disposed of in another manner. The use of recharge bores shall be to the satisfaction of the Director Infrastructure.
- 3.2. The obtaining of all required approvals, statutory or otherwise, for the installation of a recharge bore shall be the responsibility of the applicant.
- 3.3. The design of the recharge bore must take into account the depth to the water table and be to the satisfaction of the Director Infrastructure.
- 3.4. A suitable stormwater pollutant trap or other approved alternative pre-treatments required by the approval authorities shall be provided between the last stormwater entry point to the pipe drainage system and the inlet to the underground sump.

## **4. Compensating Basins**

- 4.1. Designs for detention basins, commonly referred to as compensating basins, shall be to the satisfaction of the Director Infrastructure.
- 4.2. Where compensating basins are unfenced and are located adjacent to or surrounded by Public Open Space the side slopes shall be a maximum of 1 in 8.
- 4.3. All pipes entering compensating basins shall have Protective End Treatments in accordance with the City's Standard Drawings.
- 4.4. For unfenced compensation basins the maximum overall storage depth shall not exceed 600mm.

## **5. Water Corporation Drains**

- 5.1. Where possible all stormwater systems should be connected to a Water Corporation main drain or subsidiary drain.

NOTE: Water Corporation approval shall be sought prior to design approval by the City.

- 5.2. When Water Corporation approval is denied, then procedures 1 to 4 may be implemented to the satisfaction of the Director Infrastructure.

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## **Definitions**

**Sump** means a drainage retention basin that disposes of stormwater runoff by infiltration into the ground and ultimately to the ground water table.

**Compensation basin** means a drainage detention basin that incorporates both a piped inlet and a piped outlet. Compensating basins may also incorporate infiltration into the ground and ultimately to the ground water table.

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## Relevant management practices/documents

State Water Plan (Department of Premier & Cabinet WA, 2007)  
 State Water Strategy (Department of Premier & Cabinet WA, 2003)  
 State Planning Policy 1 - State Planning Framework Policy (WAPC, 2006)  
 State Planning Policy 2 - Environment & Natural Resources (WAPC, 2003)  
 State Planning Policy 2.9 - Water Resources 2006 (WAPC)  
 Planning Bulletin 64 - Acid Sulphate Soils 2003b (WAPC)  
 Planning Bulletin 92 - Urban Stormwater Management (WAPC, 2008)  
 Better Urban Water Management 2008 (WAPC)  
 Urban Water Management Plans - Guidelines for the Preparation and Compliance with Subdivision Guidelines (DOW 2008)  
 Developing A Local Water Management Strategy (DOW, 2008)  
 Local Water Management Strategy (DOW)  
 Stormwater Management Manual for Western Australia (DOW, 2004-2007)  
 Australian Rainfall & Runoff, 4<sup>th</sup> Edition (Geoscience Australia, Institute of Engineers, Canberra, ACT, 2016)  
 Australian Runoff Quality: A Guide to Water Sensitive Urban Design (Institute of Engineers Australia, Melbourne, Victoria, 2006)

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## Legislation/local law requirements

*Local Government Act 1995*  
*Land Administration Act 1997*

### Office use only

<b>Relevant delegations</b>	Not applicable			
<b>Initial Council adoption</b>	<b>Date</b>	10 December 2013	<b>Resolution #</b>	1213/007
<b>Last reviewed</b>	<b>Date</b>	26 May 2020	<b>Resolution #</b>	0520/027
<b>Next review due</b>	<b>Date</b>	2021		