

Conceptual drawings of standard water sensitive urban design treatments for small-scale development





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www.watersensitivesa.com



### Urban stormwater design elements

The aim of this document is to provide a set of standard drawings to assist with the conceptual design of stormwater systems on small-scale developments (up to 5000 m²) as applied within the Water Sensitive SA online stormwater assessment tool, InSite Water, which is available at

https://www.watersensitivesa.insitewater.com/

This document is part of a suite of resources that have been created to support development applications, serving as an ancillary technical document with respect to water conservation and efficiency, and stormwater runoff flow, volume and quality management.

Guidelines for applicants

WSUD 01 – A guide for water sensitive urban design:
Stormwater management for

small-scale development

WSUD 02 – Residential development – deemed-tosatisfy solutions for stormwater management

Site area: < 501m<sup>2</sup>

WSUD 03 – Residential development – compliance with the InSite Water Tool Site area: 501-2500m<sup>2</sup>

WSUD 04 – Commercial development – compliance with the InSite Water Tool

Site area: < 5000m<sup>2</sup>

Standard drawings

WSUD 05 – Technical drawings of standard WSUD treatments for small-scale development Online stormwater assessment tool for small-scale development

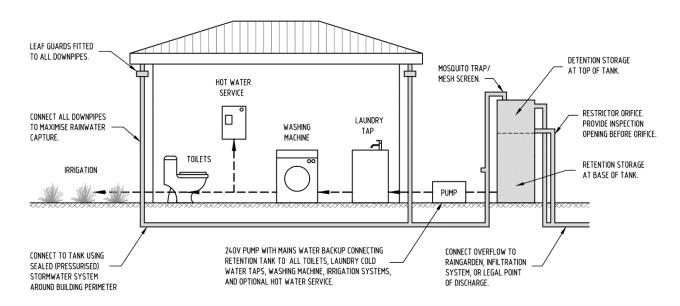
WSUD 06 – InSite Water Tool: User manual

WSUD 07 – InSite Water Tool: Engineering methods

Figure 1: Water sensitive urban design resources for development applicants



# 1 Retention tank reticulation detail



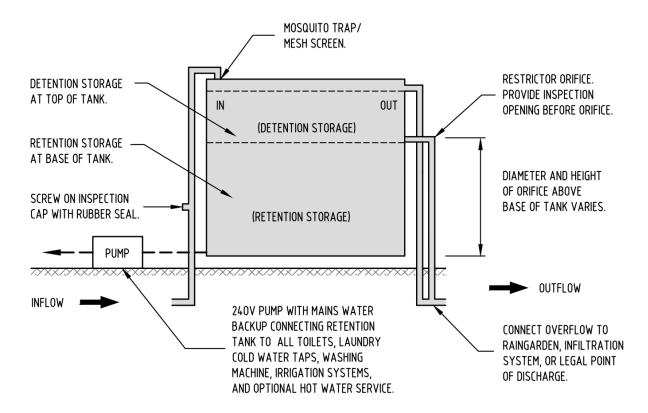
#### RETENTION TANK RETICULATION DETAIL

N.T.S

NOTE: THE DESIGN AND INSTALLATION OF ALL STORMWATER SYSTEMS SHALL COMPLY WITH AS/NZS 3500.3:2018 "STORMWATER DRAINAGE".



#### 2 Combination retention detention tank detail



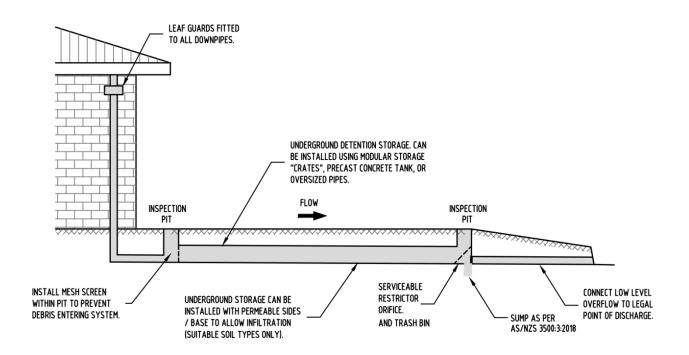
# ABOVE GROUND COMBINATION RETENTION / DETENTION TANK

N.T.S.

NOTE: THE DESIGN AND INSTALLATION OF ALL STORMWATER SYSTEMS SHALL COMPLY WITH AS/NZS 3500.3:2018 "STORMWATER DRAINAGE".



#### 3 Detention



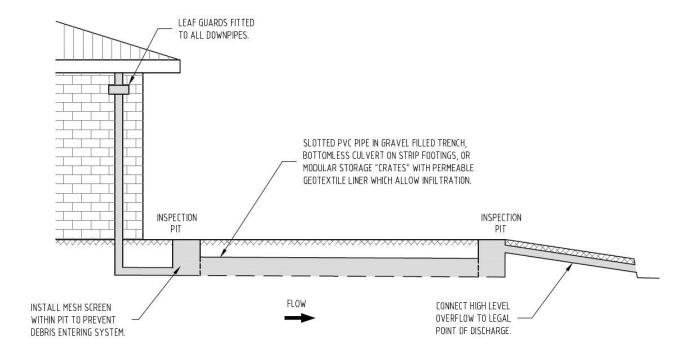
#### **UNDERGROUND DETENTION SYSTEM**

N.T.S.

NOTE: THE DESIGN AND INSTALLATION OF ALL STORMWATER SYSTEMS SHALL COMPLY WITH AS/NZS 3500.3:2018 "STORMWATER DRAINAGE".



#### Infiltration trench 4



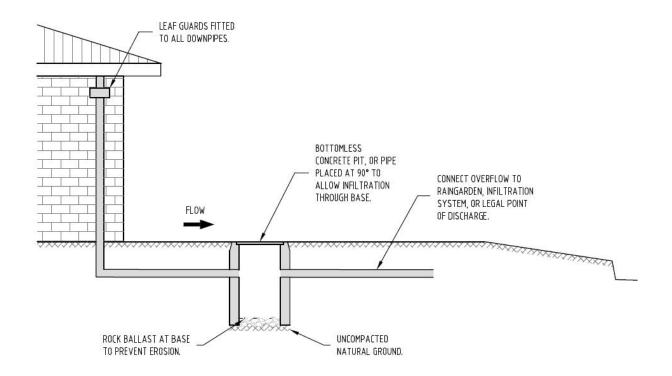
# **INFILTRATION TRENCH**

N.T.S.

NOTE: THE DESIGN AND INSTALLATION OF ALL STORMWATER SYSTEMS SHALL COMPLY WITH AS/NZS 3500.3:2018 "STORMWATER DRAINAGE". (AND WITH "MINISTER'S SPECIFICATION SA78AA. SEPTEMBER 2003. ON-SITE RETENTION OF STORMWATER)



# 5 Infiltration pit



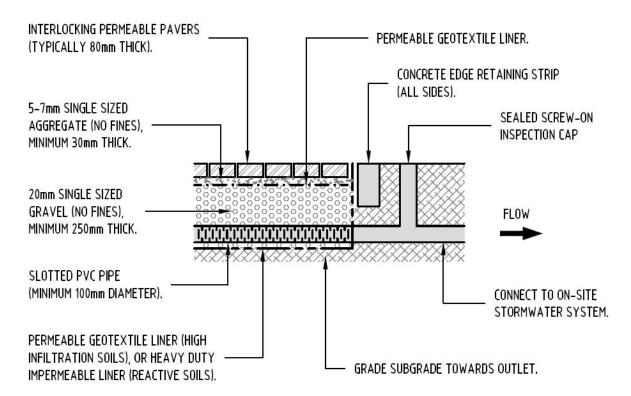
#### INFILTRATION PIT

NTS

NOTE: THE DESIGN AND INSTALLATION OF ALL STORMWATER SYSTEMS SHALL COMPLY WITH AS/NZS 3500.3:2018 "STORMWATER DRAINAGE". (AND WITH "MINISTER'S SPECIFICATION SA78AA. SEPTEMBER 2003. ON-SITE RETENTION OF STORMWATER)



### 6 Permeable pavement



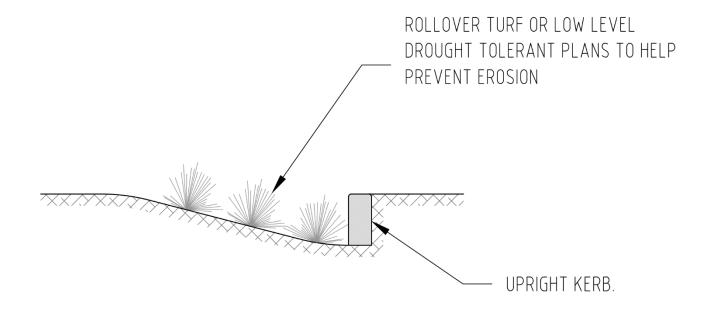
# PERMEABLE PAVEMENT

N.T.S.

NOTE: THE DESIGN AND INSTALLATION OF ALL STORMWATER SYSTEMS SHALL COMPLY WITH AS/NZS 3500.3:2018 "STORMWATER DRAINAGE".



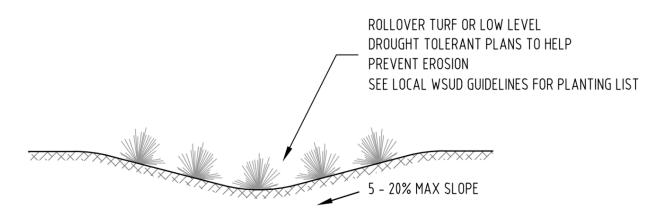
#### 7 Grass buffer



# VEGETATED BUFFER STRIP

N.T.S.

#### 8 Swale

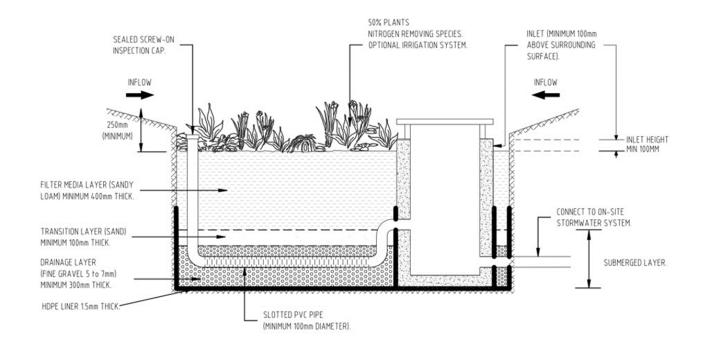


# VEGETATED SWALE

N.T.S.



# 9 Raingarden

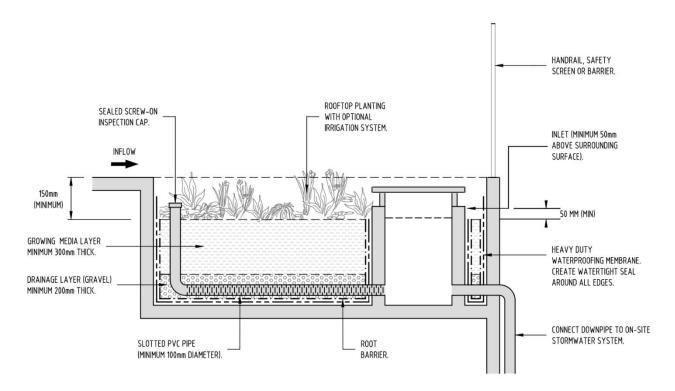


#### RAINGARDEN

NOT TO SCALE NOTE: THE DESIGN AND INSTALLATION OF ALL STORMWATER SYSTEMS SHALL COMPLY WITH AS/NZS 3500.3:2018 "STORMWATER DRAINAGE".



# 10 Rooftop garden



#### **ROOFTOP GARDEN**

N.T.S.
NOTE: THE DESIGN AND INSTALLATION OF ALL
STORMWATER SYSTEMS SHALL COMPLY WITH
AS/NZS 3500.3:2018 "STORMWATER DRAINAGE".