

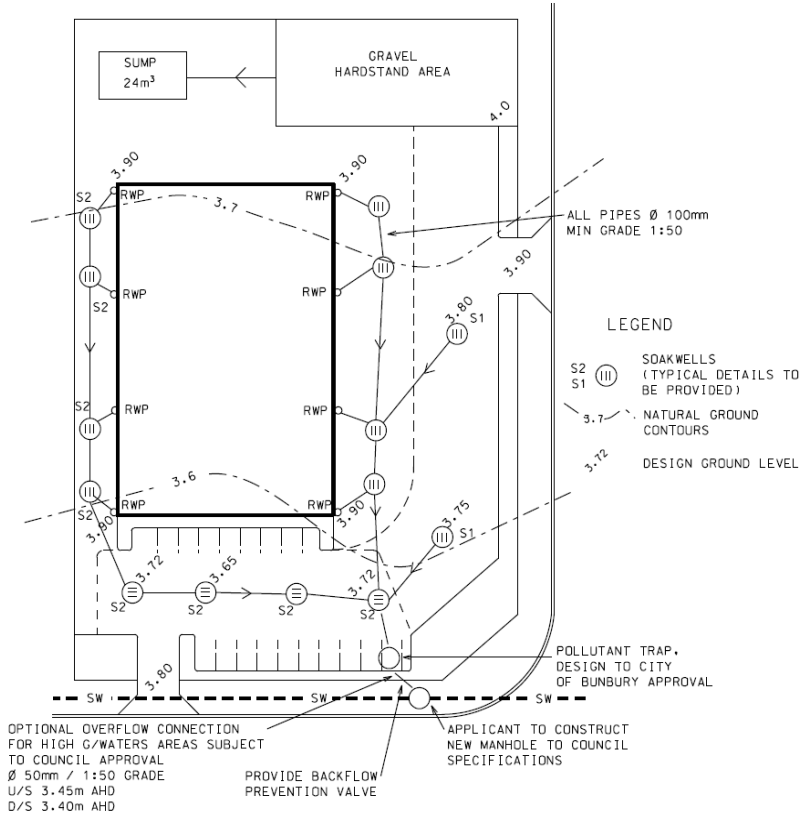
Information Guide – Stormwater Drainage Plan

When a “Stormwater Drainage Plan” is required as a condition of a planning approval, it should comply with the Information Guide - Stormwater Disposal from Private, Commercial and Industrial Properties’ and contain the following information:

- North arrow and scale (all plans are to be provided at 1:200).
- Location of existing buildings to be retained and any existing building to be removed.
- Existing ground levels and contours, levels are to be in Australian Height Datum (AHD).
- Details of roads, accessways, crossovers, car parking and manoeuvring, fencing and verge treatments (including extent of sealed areas and stormwater drainage)
- Site levels, floor levels, location and details of cut/fill, and method of retaining - levels are to be in Australian Height Datum (AHD).
- Method of stormwater treatment (see diagram MISC-02-01 for an example of drainage plan using soakwells, over page)
- Groundwater impact assessment
- Others services located on site (e.g. Western Power/ Alinta / Telstra).
- Volume retention calculations

Typical volumes and areas served by standard sized soakwells is summarised in the following table for designers reference:

Soakwell size Diameter (m) x depth (m)	Storage Volume	Area served - 2m ² per 65m ²	Area served – sandy areas 1m ³ per 65m ²
Ø 1.8m x 1.2m	3.0m ³	100 m ²	200 m ²
Ø 1.5m x 1.2m	2.1 m ³	70 m ²	140 m ²
Ø 1.2m x 1.2m	1.4 m ³	45 m ²	90 m ²
Ø 1.2m x 0.9m	1.0 m ³	35 m ²	70 m ²
Ø 0.2m x 0.6m	0.4 m ³	12 m ²	25 m ²



STORMWATER DRAINAGE

Soakwell sizes: S1 = 1800 dia x 1800 deep = 4.6 m²
S2 = 1500 dia x 1200 deep = 2.1 m³

Sump size: 10m x 5m x 0.48 av.ht. = 24.0 m³
invert level 3.10m AHD

Storage in carpark: crossover level (overflow level) = 3.80 m AHD
average height of storage area = 0.066 m
area at crossover level = 500 m²
volume = 33.0 m³

Impervious Areas	Area (m ²)	Design Vol. (m ³) 2m ³ per 65m ²	Storage volume in Soakwells / Sumps (minimum 1m ³ /65m ²)	Additional 1m ³ / 65 m ² Storage above ground	Total Volume retained within the property
Roof Area	1000	30.8 m ³	16.8 m ³ (08 nos S2)	} 33.0 m ³ (carpark)	} 67.2 m ³
Car Park Area	500	15.4 m ³	8.2 m ³ (04 nos S2)		
Paved Area	600	18.4 m ³	9.2 m ³ (02 nos S1)		
Gravel hardstand	750	23.0 m ³	24.0 m ³ (sump)		24.0 m ³
TOTAL	2850	87.6 m³			91.2 m³

BUNBURY CITY COUNCIL			
STORMWATER DRAINAGE PLAN			
(SAMPLE ONLY)			
SCALE N.T.S	DESIGN A.T.	DRAWN D.S. 01/2002	CHECKED A.T. 01/2002
APPROVED		REVISED	
CITY ENGINEER		DATE	
MISC - 02 - 01			SHEET 1 OF 1