

## **APPENDIX 5**

### **Selected Stormwater Treatment and Disposal Practice Components**

CPG



## Stormwater Components Appraisal

System	Quality Improvement	Quantity Management	Aesthetics/Amenity	Maintenance	Cost	Land take	Safety	Remarks
Swales	Filtration and sedimentation.	Potential for incorporating attenuation storage and conveyance.	Open landscape areas/green links.	Low maintenance.	Suitable for flat site. Careful grass seed mix selection and initial growth control required.	Medium to High	Potential issues of standing water and vehicle entry.	Can be combined with filter strips and filter drains to increase level of treatment. Overland sheet flow preferred to localised discharge from piped gullies etc. Simplicity is an advantage. A good option for the proposed development.
Filter Drain	Filtration.	Attenuation potential and conveyance.	N/A	Low maintenance. Long term remedial action to clean filter material.	Reduced drainage costs. Low cost/option.	Minimal land take	No issues.	Careful detailing required to avoid blockage. Simplicity is an advantage. A good option for the proposed development.

System	Quality Improvement	Quantity Management	Aesthetics/Amenity	Maintenance	Cost	Land take	Safety	Remarks
Extended Detention Pond	Settlement and some biological treatment.	Ideally suited for attenuation storage and treatment.	Incorporated within open space/ green areas. Could be used as kick about pitch at dry weather.	Low cost single end of pipe system provides greater control, visibility and access. Sediments removal may be required during the initial period prior to establishment of contributing catchment.	High cost of construction	High	Potential issues of standing water and vehicle entry.	Often favoured by developers as a single end of pipe solution that can be easily managed within development. More complex design required. A good option for the proposed development.
Infiltration Basins	Physical filtration, absorption and biochemical treatment. Pre-treatment recommended.	Provides some storage. Significantly reduces run-off rate and volume to watercourse.	Incorporated within open space/ green areas. Enhances groundwater recharge.	Periodic replacement of media required. Sediments removal may be required during the initial period prior to establishment of contributing catchment.	High cost of construction	High	N/A	Care required to avoid pollution of sensitive groundwaters. A good option for the proposed development.