

SPEL Basin

Modular bio-retention basin



spelstormwater
joy in water

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APPLICATIONS

- Car parks & shopping centres
- Council depots
- Industrial estates
- Heavy vehicle maintenance
- Transport depots & loading bays
- Tunnels
- Highways & transport corridors
- Recycling yards
- Airport aprons & tarmacs

The SPeL Basin is an advanced stormwater treatment system that works with natural forces to provide superior pollutant removal. Delivered as a pre-fabricated, compact and self-contained treatment system, the SPeL Basin utilises HORIZONTAL FLOW bioretention technology and multistage pre-treatment.

Easy to size, install and maintain, the SPeL Basin is ideally suited for the urban environment – treating runoff from parking lots, roadways, residential and commercial developments and/or retrofit applications.

Available in numerous sizes and various inlet configurations, including internal high flow bypass, the SPeL Basin is clearly the most versatile and innovative stormwater treatment system.

BENEFITS

- Built-in bypass available with all configurations
- All configurations utilise a pre-treatment chamber which contains:
 - Litter capture
 - Sediment chamber
 - Pre-filter cartridges



FEATURES

1 Pre-treatment chamber

Captures incoming runoff and contains the first three stages of treatment.

2 Grate type catch basin inlet

A standard grate type traffic rated catch basin opening directs stormwater into the system.

3 Catch basin insert filter

Provides the first stage of treatment by capturing trash & litter, gross solids, and sediment.

4 Settling chamber

Provides the second stage of treatment by separating out larger suspended solids.

5 Pre-filter cartridge

Provides the third stage of treatment by physically and chemically capturing fine TSS, metals, nutrients, and bacteria.

6 Wetland chamber

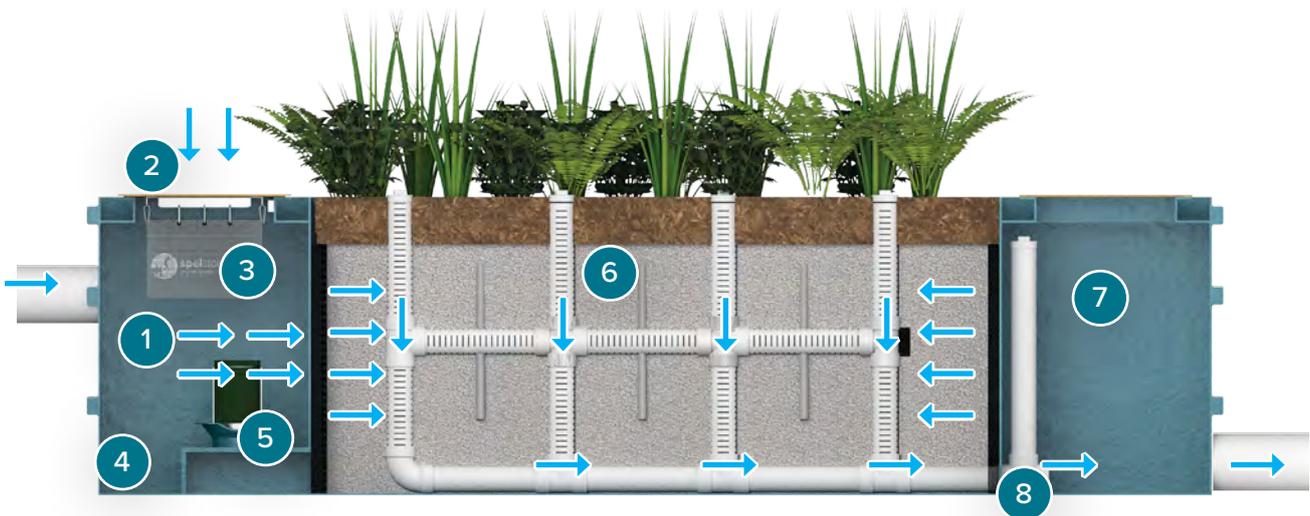
Provides the final stage of treatment through a combination of physical, chemical and biological processes.

7 Discharge chamber

Contains flow control, high flow bypass and optional drain down filter.

8 Multi-level flow control

Orifice plates and/or valves are used to control the flow through the treatment stages.



Volume Sizing

The SPEL Basin Modular Wetlands system can be designed to treat flows from detention systems or directly off hardstand surfaces. Contact SPEL for more information.

MUSIC Modelling

The SPELBasin Modular Bioretention System is modeled [typically in MUSIC] for each project based on the site specific requirements.

Tested Treatment Efficiencies*

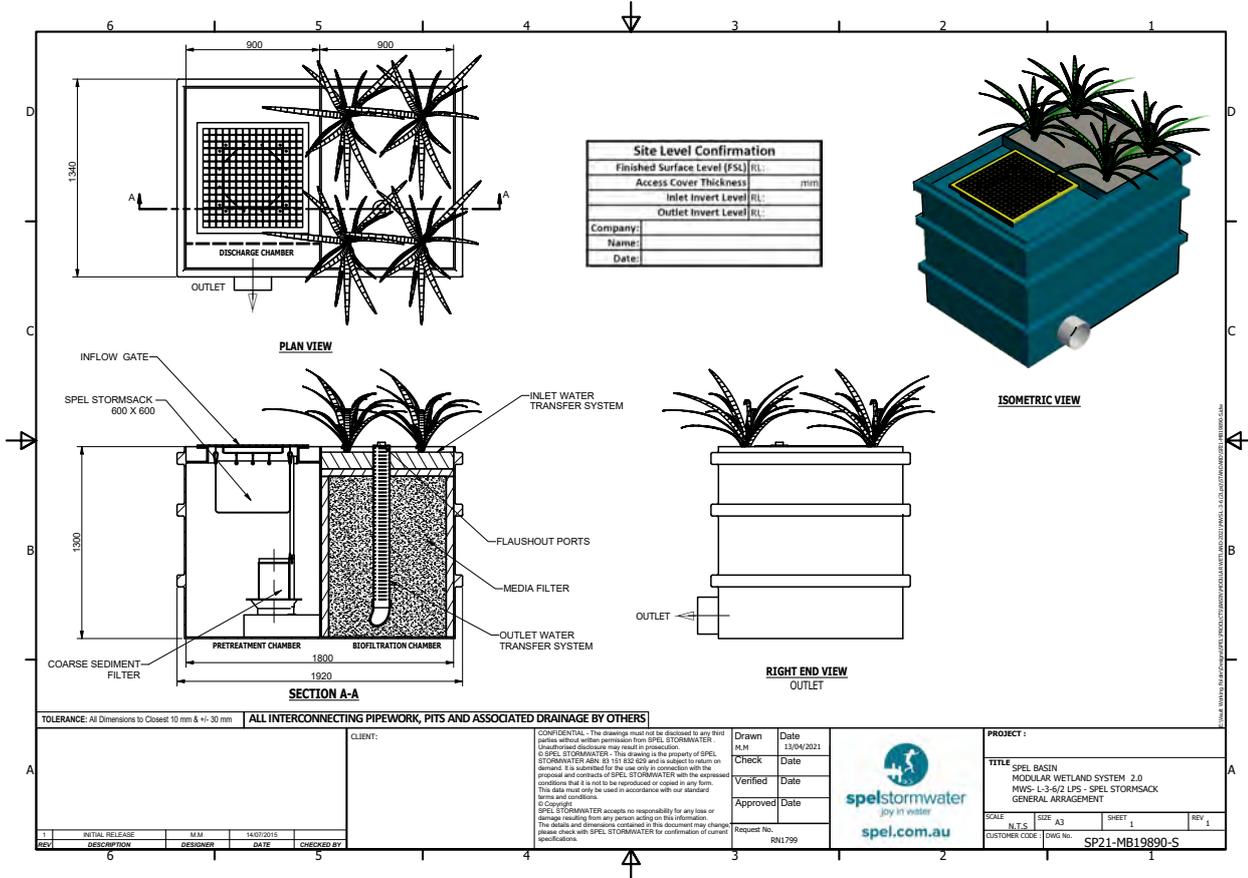
Pollutant	Efficiency
Gross Pollutants (GP)	99%
Total Suspended Solids (TSS)	86%
Total Phosphorus (TP)	65%
Total Nitrogen (TN)	50%

*Contact Spel to confirm approved performance for the project LGA

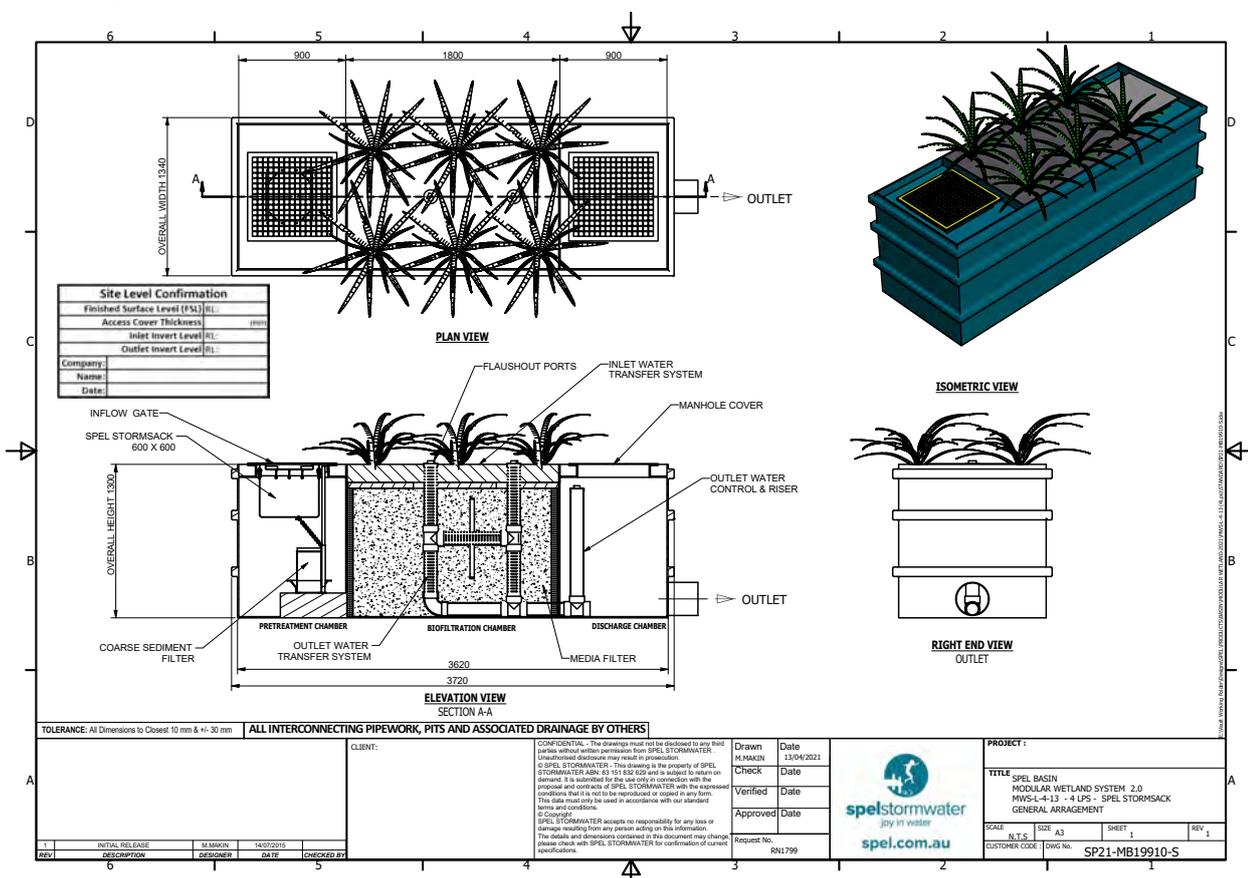


DRAWINGS

Drawing 2LPS

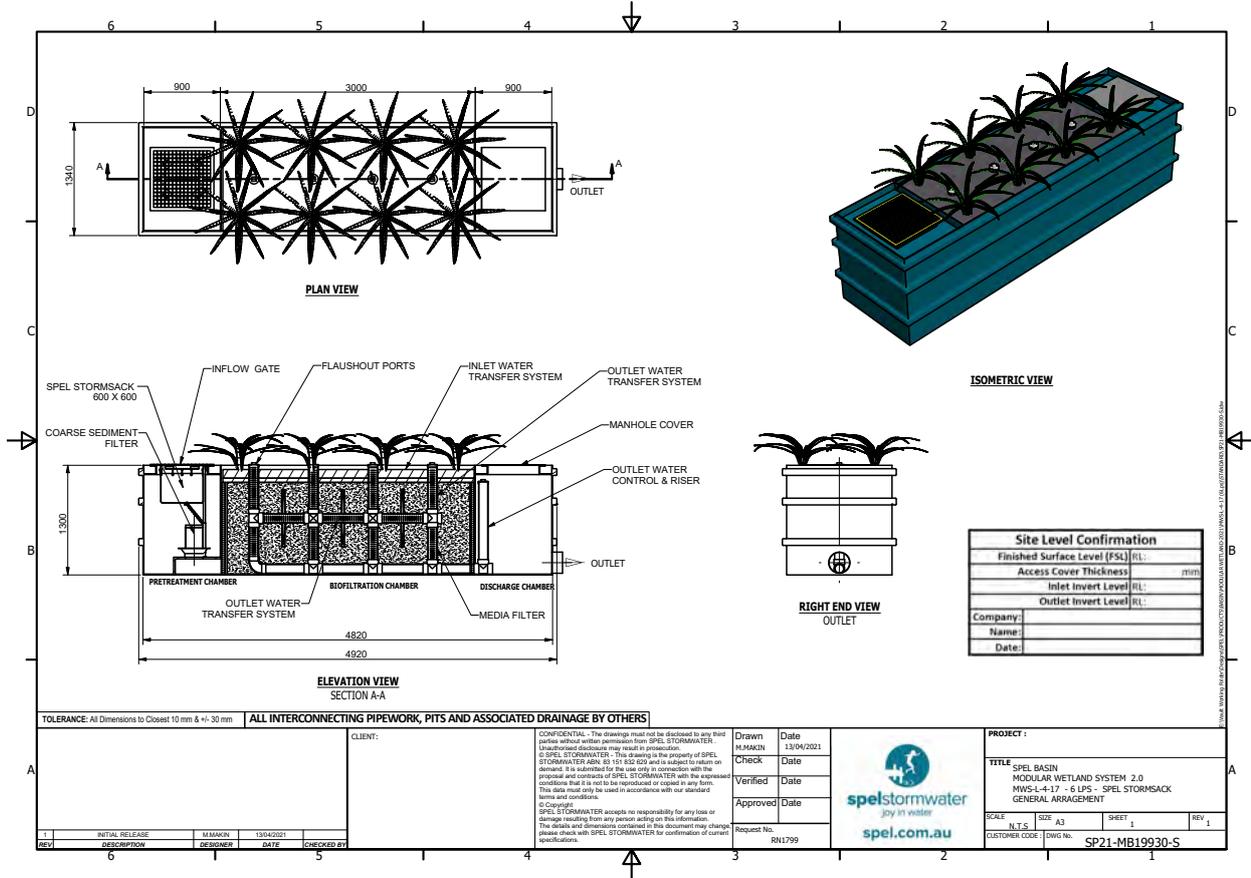


Drawing 4LPS

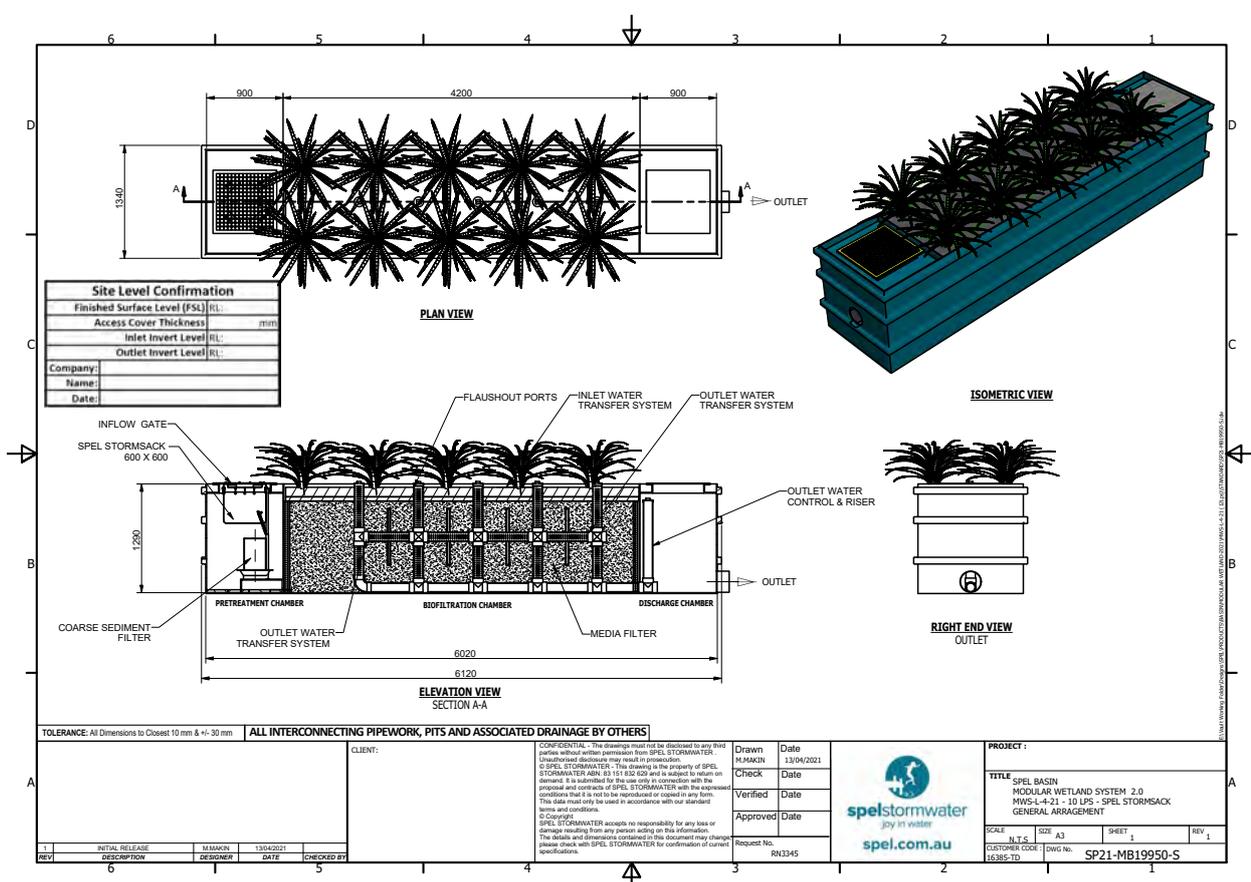


DRAWINGS

Drawing 6LPS



Drawing 10LPS



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We believe clean water is a right not a privilege and we work to ensure a joy in water experience for you with your children and grandchildren.



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