

# SPEL Basin

Modular bio-retention basin





# 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 SPELBasin 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 SPELBasin utilises HORIZONTAL FLOW bioretention technology and multistage pre-treatment.

Easy to size, install and maintain, the SPELBasin 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 SPELBasin 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

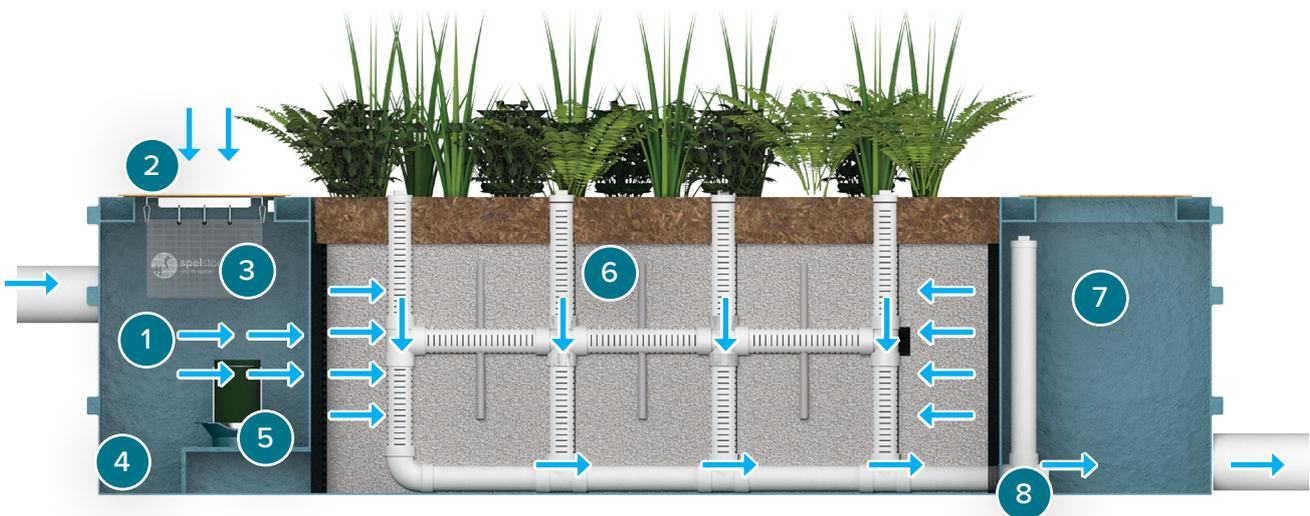
Provides the final stage of treatment through a combination of physical, chemical and biological processes.

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

### Tested Treatment Efficiencies\*

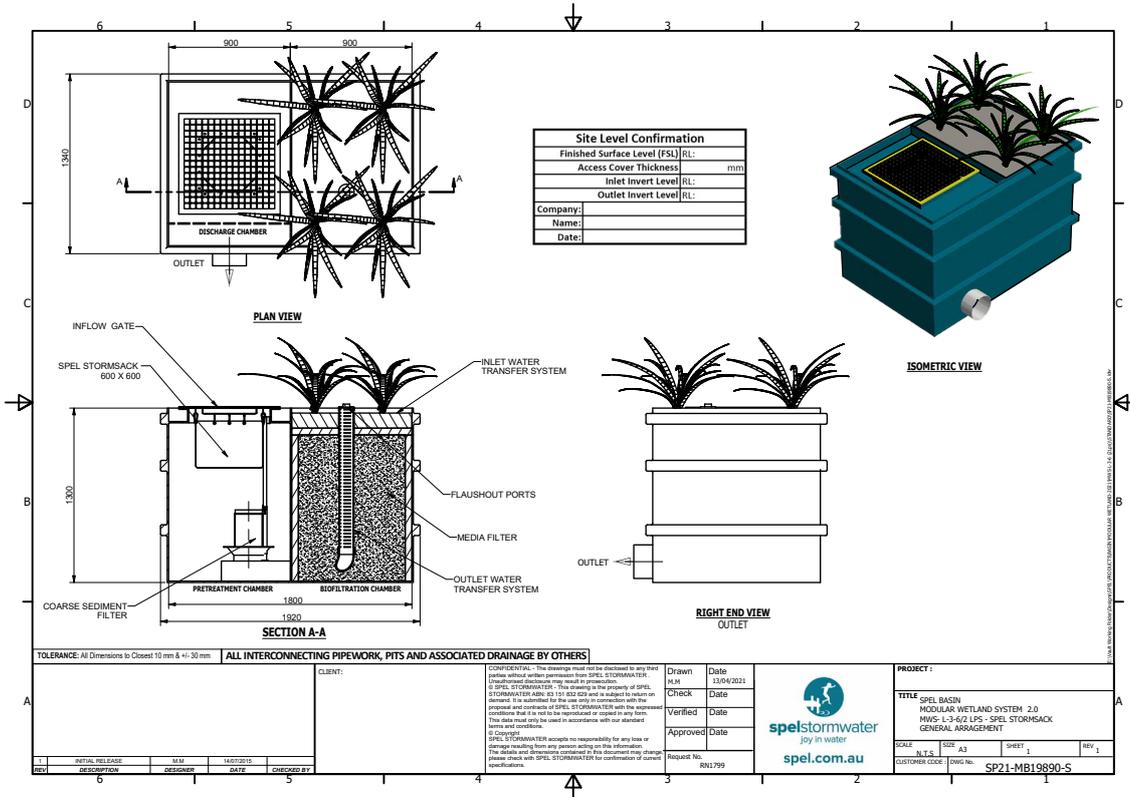
Pollutant	Efficiency
Gross Pollutants (GP)	99%
Total Suspended Solids (TSS)	86%
Total Phosphorus (TP)	65%
Total Nitrogen (TN)	50%

\*Contact Spel to confirm approved performance for the project LGA

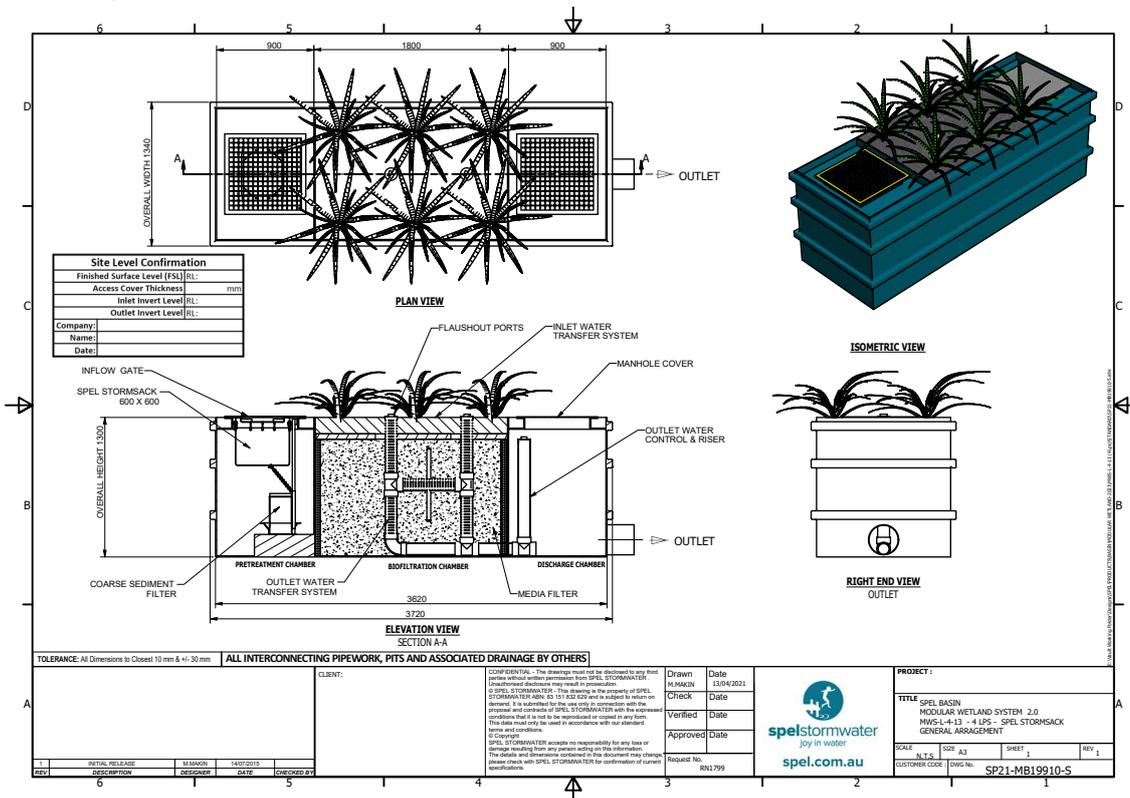


# DRAWINGS

## Drawing 2LPS

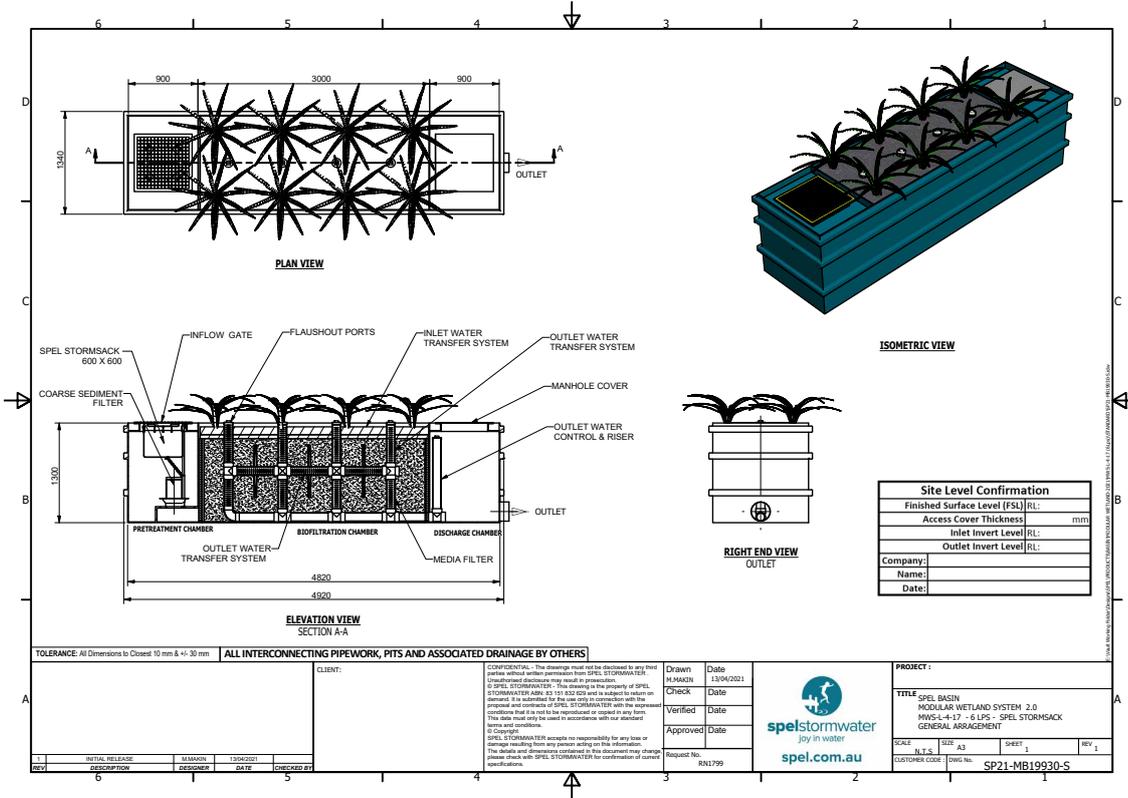


## Drawing 4LPS

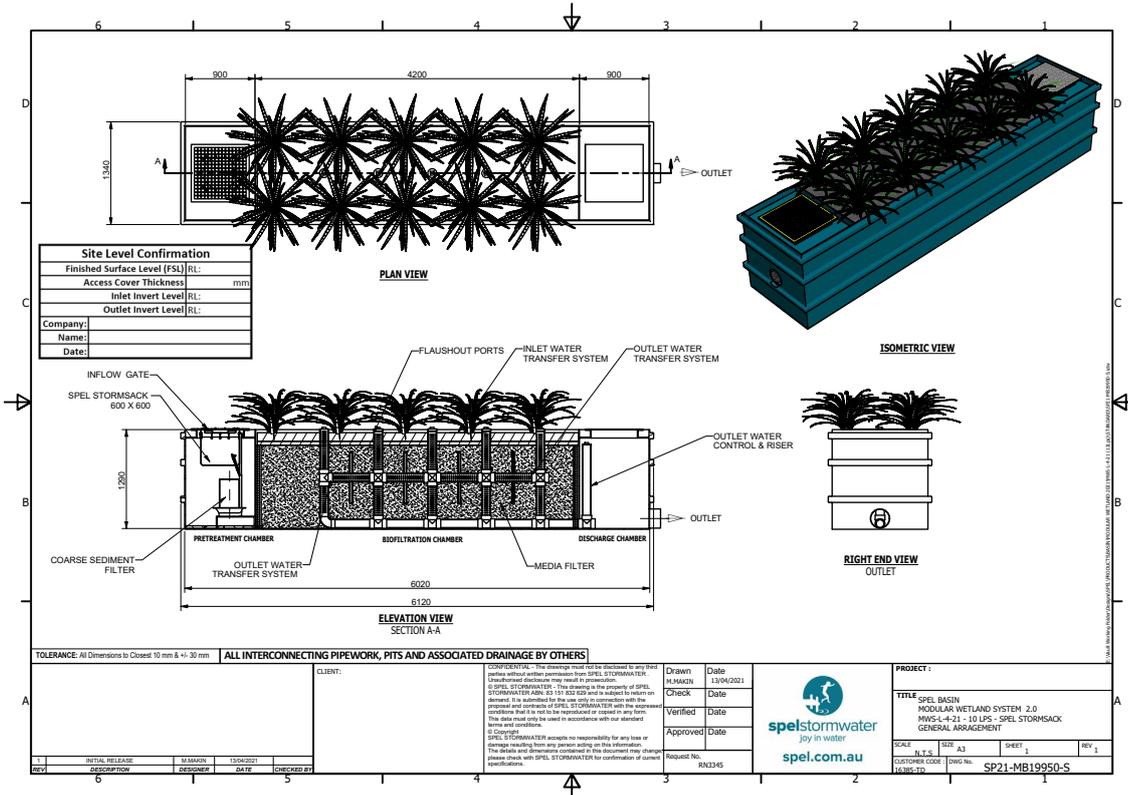


# DRAWINGS

## 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.



**spelstormwater**  
joy in water

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