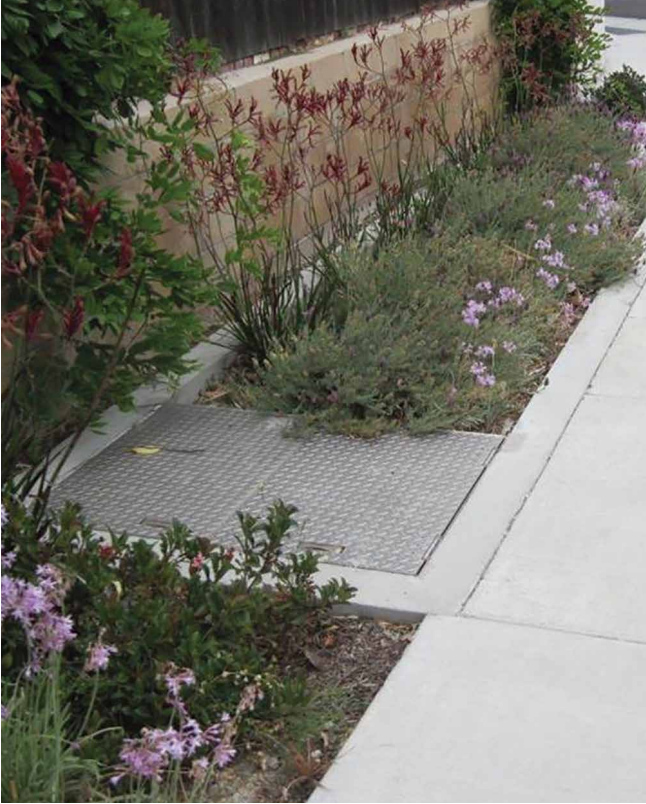


# SPEL Basin

Modular bio-retention basin



[spel.co.nz](http://spel.co.nz)



# 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

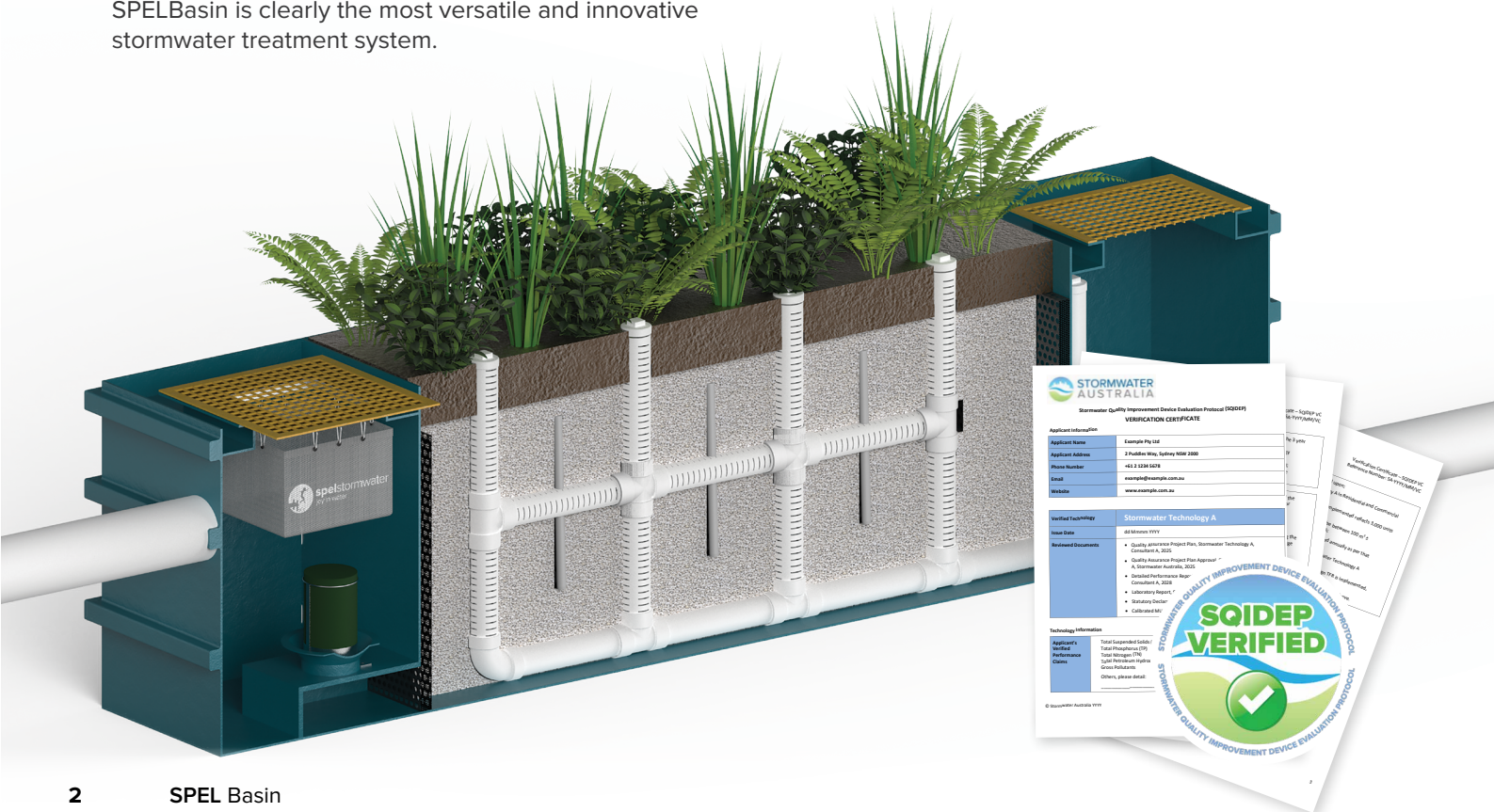
The SPELBasin is an advanced stormwater treatment system that works with natural forces to provide superior pollutant removal. Delivered as a pre-fabricated, compact and self-contained treatment system, the SPELBasin utilises HORIZONTAL FLOW bioretention technology and multistage pre-treatment.

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.

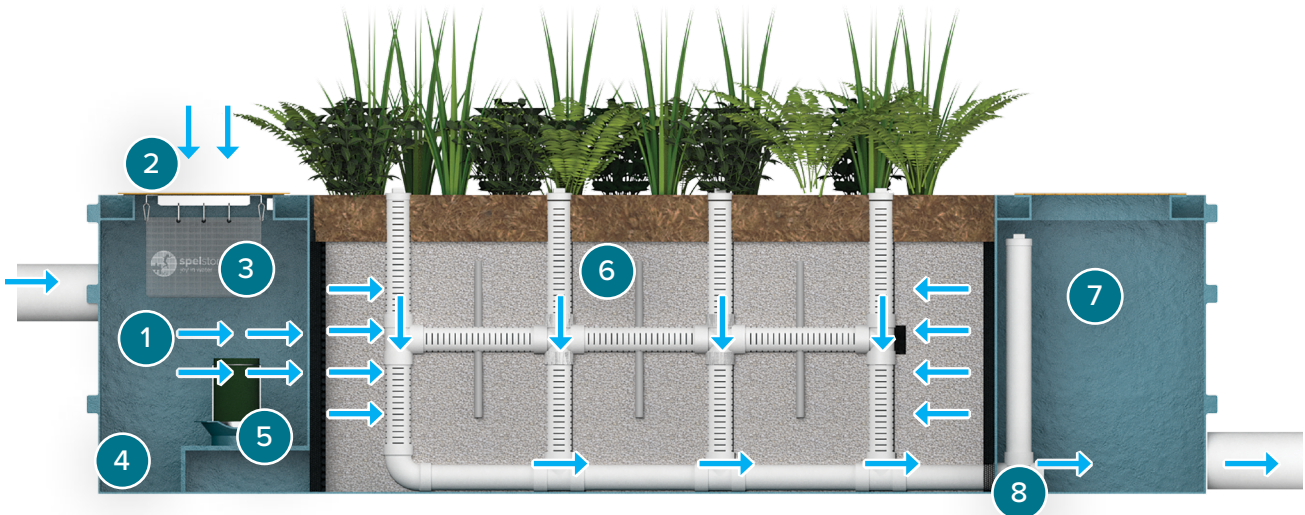
# BENEFITS

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



# FEATURES

- |  |  |
|--|--|
| <p><b>1 Pre-treatment chamber</b><br/>Captures incoming runoff and contains the first three stages of treatment.</p>                             | <p><b>5 Pre-filter cartridge</b><br/>Provides the third stage of treatment by physically and chemically capturing fine TSS, metals, nutrients, and bacteria.</p> |
| <p><b>2 Grate type catch basin inlet</b><br/>A standard grate type traffic rated catch basin opening directs stormwater into the system.</p>     | <p><b>6 Wetland chamber</b><br/>Provides the final stage of treatment through a combination of physical, chemical and biological processes.</p>                  |
| <p><b>3 Catch basin insert filter</b><br/>Provides the first stage of treatment by capturing trash &amp; litter, gross solids, and sediment.</p> | <p><b>7 Discharge chamber</b><br/>Contains flow control, high flow bypass and optional drain down filter.</p>  |
| <p><b>4 Settling chamber</b><br/>Provides the second stage of treatment by separating out larger suspended solids.</p>                           | <p><b>8 Multi-level flow control</b><br/>Orifice plates and/or valves are used to control the flow through the treatment stages.</p>                             |



## 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\*

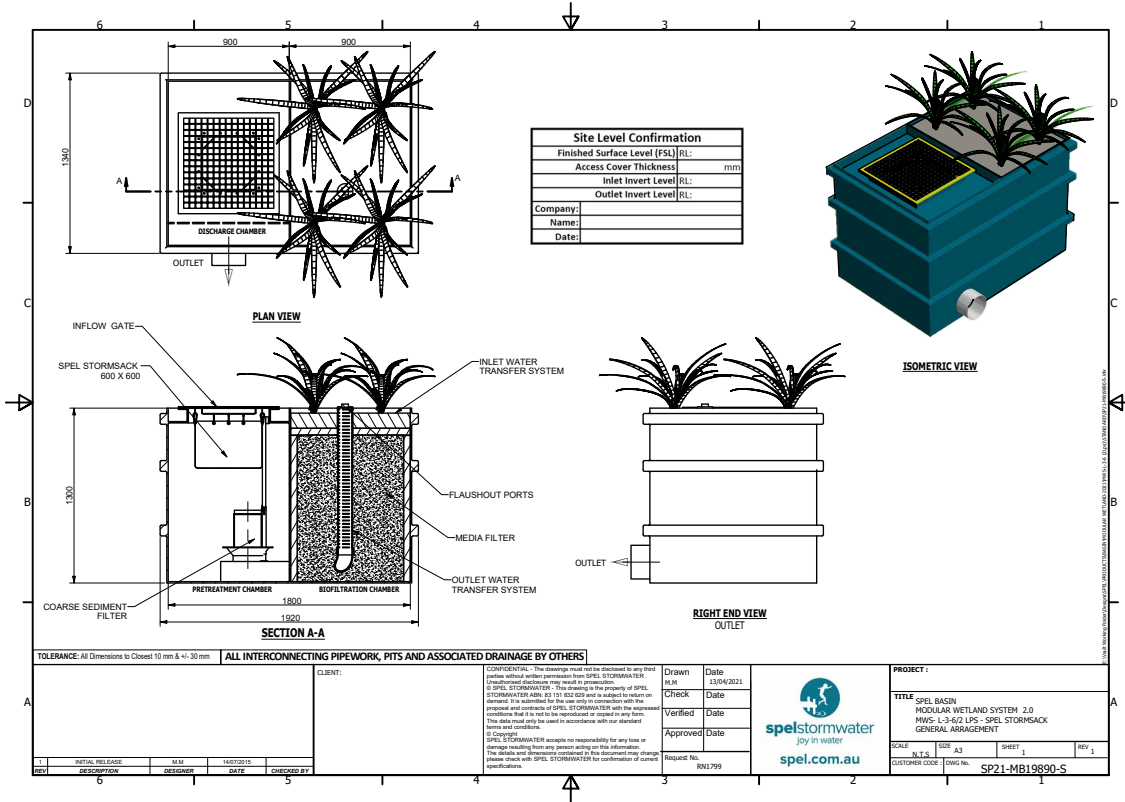
Pollutant	Efficiency
Gross Pollutants (GP)	99%
Total Suspended Solids (TSS)	86%
Total Phosphorus (TP)	65%
Total Nitrogen (TN)	50%

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

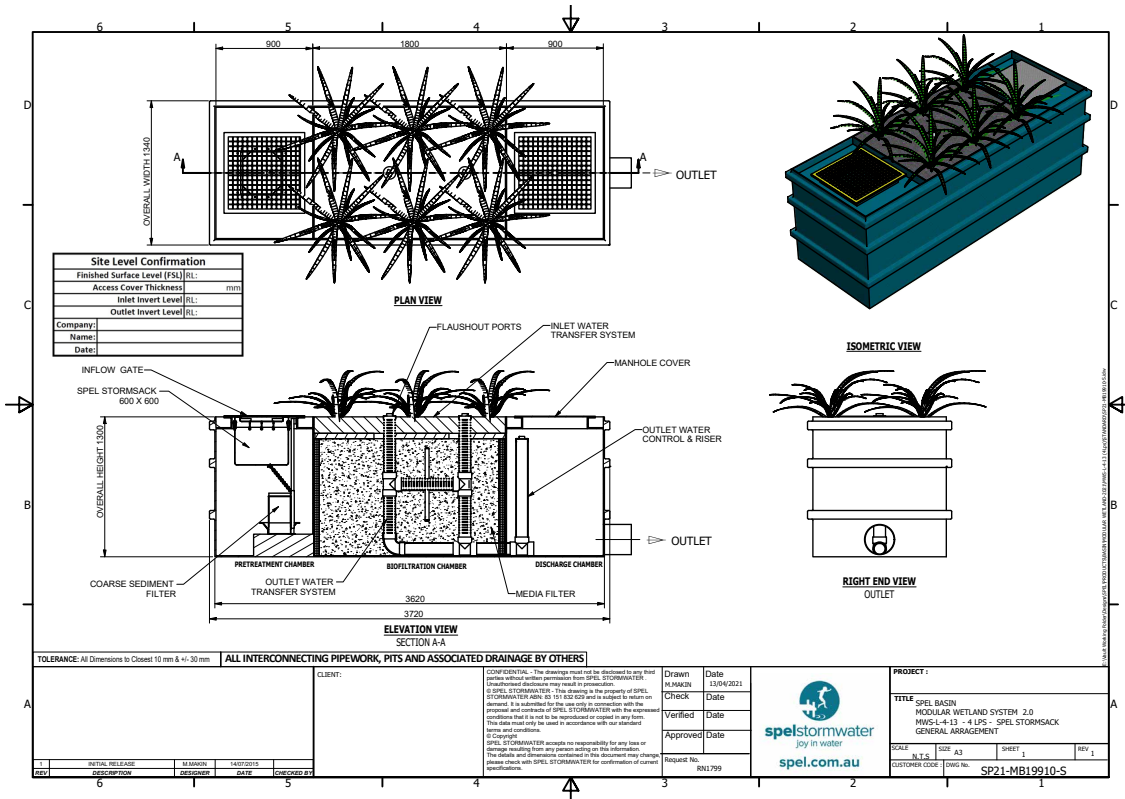


# DRAWINGS

## Drawing 2LPS

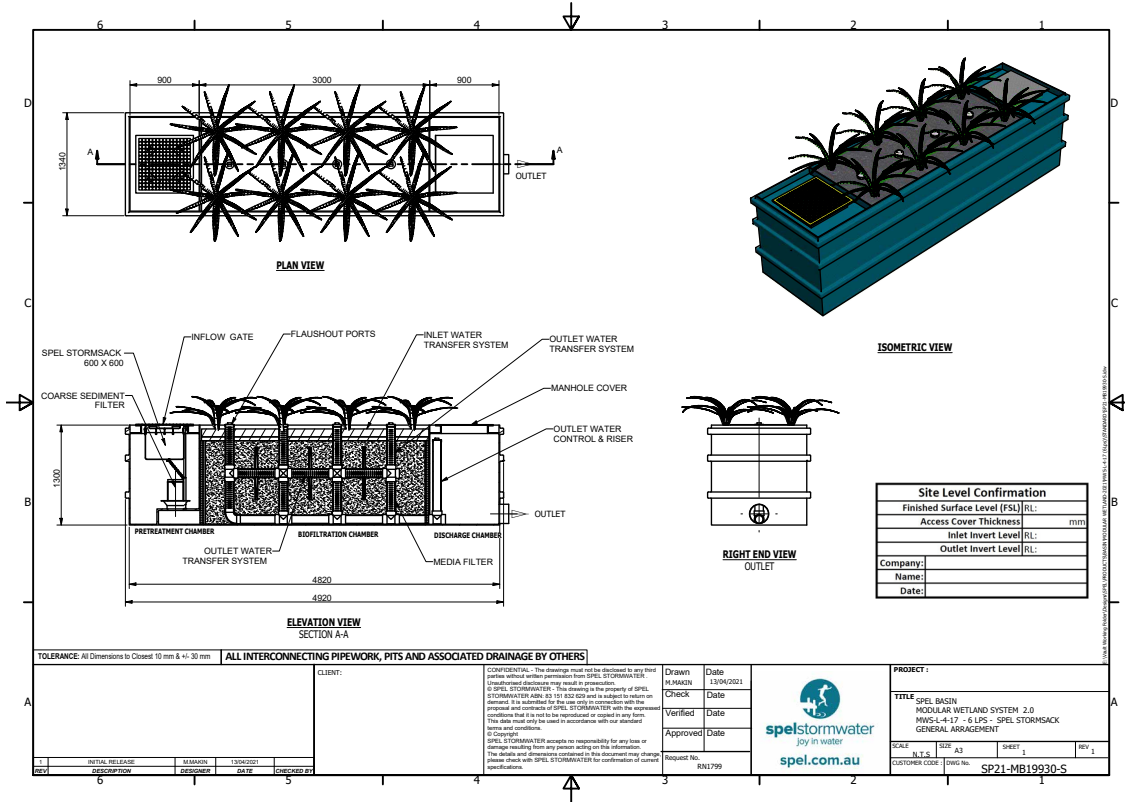


## Drawing 4LPS

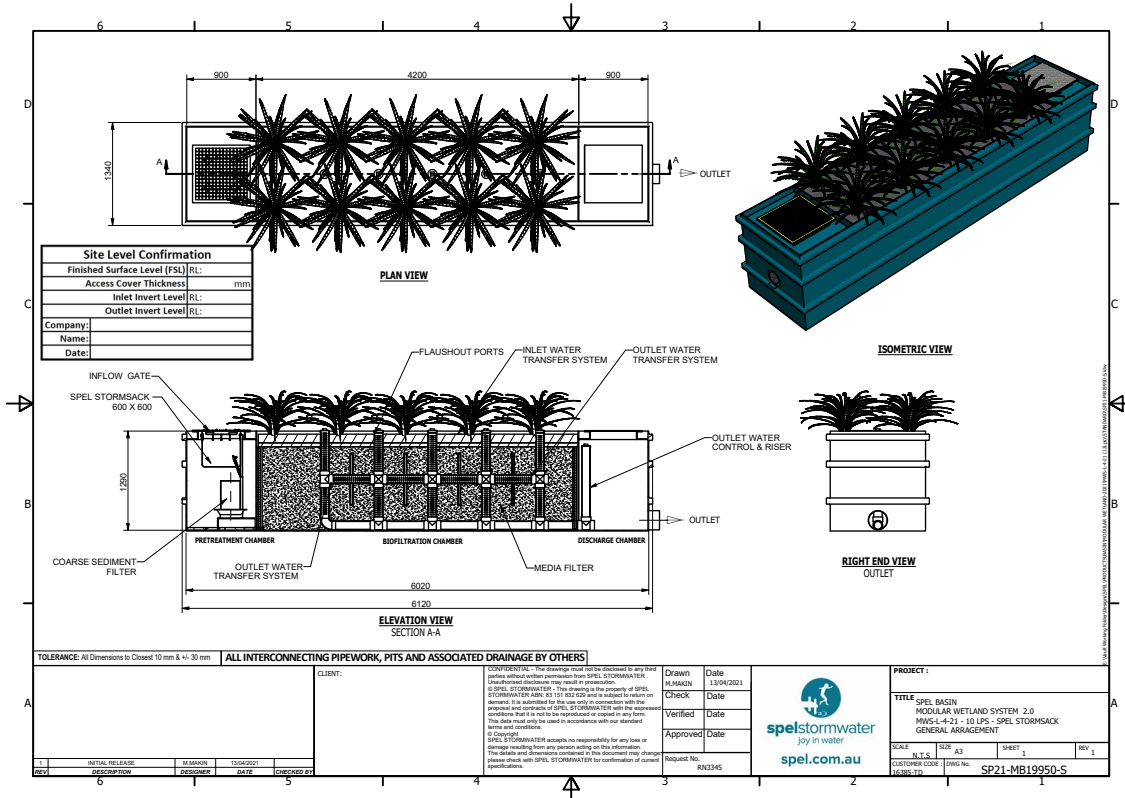


# DRAWINGS

## Drawing 6LPS



## Drawing 10LPS

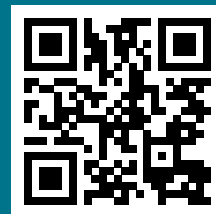


# SPEL Basin

Modular bio-retention basin

<p><b>NSW HEAD OFFICE</b> 100 Silverwater Rd, Silverwater NSW 2128 PO Box 7138, Silverwater NSW 1811 P: +61 2 8705 0255 P: 1300 773 500 E: nsw.sales@spel.com.au</p>	<p><b>QLD MAIN OFFICE</b> 130 Sandstone Pl, Parkinson QLD 4115 P: +61 7 3271 6960 P: 1300 773 500   E: qld.sales@spel.com.au</p> <p><b>QLD SUNSHINE COAST BRANCH</b> 19-27 Fred Chaplin Circuit, Bells Creek, QLD 4551 P: 1300 773 500   E: qld.sales@spel.com.au</p>	<p><b>VIC &amp; TAS OFFICE</b> 897 Wellington Rd Rowville VIC 3178 P: +61 3 5274 1336 P: 1800 810 139   E: sales@spel.com.au</p> <p><b>VIC GEELONG BRANCH</b> 70 Technology Close, Corio, P: +61 3 5274 1336 P: 1800 810 139   E: sales@spel.com.au</p>
<p><b>SA OFFICE</b> 9 Hampden Road, Mount Barker SA 5251 P: 1300 773 500 E: sales@spel.com.au</p>	<p><b>WA OFFICE</b> 2 Modal Crescent Canning Vale WA 6155 P: +61 8 9350 1000 P: 1800 335 550 E: sales@spel.com.au</p>	<p><b>NZ OFFICE AUCKLAND</b> 100 Montgomerie Road Airport Oaks P: +64 9 276 9045 E: sales@spel.co.nz</p>
<p><b>NZ OFFICE WANGANUI</b> 43 Heads Road Wanganu New Zealand P: +64 6 349 0088   E: sales@spel.co.nz</p>	<p><b>NZ OFFICE WELLINGTON</b> 41 Raiha St Porirua Wellington New Zealand P: +64 4 239 6006   E: sales@spel.co.nz</p>	<p><b>PHILIPPINES OFFICE METRO MANILA</b> Unit 2210 Lumiere Residences Pasig Boulevard, Pasig City P: +61 2 8705 0255 P: 1300 773 500 E: sales@spel.com.au</p>
<p><b>SINGAPORE OFFICE</b> 512 Chai Chee Lane, #06-04 Bedok Industrial Estate, Singapore 469028 P: +61 2 8705 0255 P: 1300 773 500   E: sales@spel.com.au</p>	<p><b>UK OFFICE UNITED KINGDOM</b> Lancaster Rd Shrewsbury SY1 3NQ UK P: +44 (0)1743 445200   E: sales@spel.com.au</p>	<p><b>USA OFFICE CLEVELAND</b> 4548 Industrial Parkway Cleveland, Ohio 44135 P: +61 2 8705 0255 P: 1300 773 500 E: sales@spel.com.au</p>

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

100 Montgomerie Road, Airport Oaks Auckland New Zealand  
Phone: 09 930 7417  
Email: sales@spel.co.nz

[spel.co.nz](https://www.spel.co.nz)

SPEL Stormwater accepts no responsibility for any loss or damage resulting from any person acting on this information. The details and dimensions contained in this document may change, please check with SPEL Stormwater for confirmation of current specifications.