

SPEL Hydrosystem

Cartridge filter for tertiary stormwater treatment



spelstormwater
joy in water

spel.com.au



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

SPEL Hydrosystem is a specialist stormwater filter, designed for installation within load bearing shafts and chambers of concrete or plastic construction. The pre-fitted plastic housing is safe and easy to fit on site.

The SPEL Hydrosystem uses an up-flow process. This means there is a minimal head drop between the inlet and the outlet. The stormwater is treated within the unit by the following processes: sedimentation, filtration, adsorption and precipitation. It is suitable for Heavy Metal, TSS and Nutrient reduction.

Tested Treatment Efficiencies*

Pollutant	Efficiency
Gross Pollutants (GP)	100%
Total Suspended Solids (TSS)	85%
Total Phosphorus (TP)	66%
Total Nitrogen (TN)	43%
Petroleum Hydrocarbon	82%

*Contact Spel to confirm approved performance for the project LGA



FEATURES

- German-Engineered for heavily polluted traffic areas
- Because of its up-flow process it can efficiently work in flat sites requiring only 250 mm fall across the device
- Multiple units can be manifolded together to treat higher flows
- Each SPEL Hydrosystem will provide 12 L/s of treatment flow rate, installed in offline configuration
- Field tested
- Quick and easy underground installation
- Designed for TSS, TP and TN Removal

SPECIFICATIONS

Model	NO. CARTRIDGE	TFR	ID (m)	Height (m)	Inlet/Outlet (mm)
400 SERIES					
SHS.400/1	1	2.5 LPS	1.13	1.5	100
SHS.400/2	2	5 LPS			
SHS.400/3	3	7.5 LPS			
1000 SERIES					
SHS.1000/4	4	12 LPS	1.20	2.60	225
1500 SERIES					
SHS.1500/4	4	16 LPS	1.50	2.00	225
SHS.1500/5	5	20 LPS			
SHS.1500/6	6	24 LPS			
1850 SERIES					
SHS.1850/7	7	28 LPS	1.85	2.00	225
2200 SERIES					
SHS.2200/7	7	28 LPS	2.20	2.50	225
SHS.2200/8	8	32 LPS			
SHS.2200/9	9	36 LPS			
2500 SERIES					
SHS.2500/10	10	40 LPS	2.50	2.70	300
SHS.2500/11	11	44 LPS			
SHS.2500/12	12	48 LPS			
SHS.2500/13	13	52 LPS			
SHS.2500/14	14	56 LPS			
SHS.2500/15	15	60 LPS			
SHS.2500/16	16	64 LPS			

Model	NO. CARTRIDGE	TFR	ID (m)	Height (m)	Inlet/Outlet (mm)
3000 SERIES					
SHS.3000/17	17	68 LPS	3.00	2.85	300
SHS.3000/18	18	76 LPS			
SHS.3000/19	19	76 LPS			
SHS.3000/20	20	80 LPS			
SHS.3000/21	20	84 LPS			
3500 SERIES					
SHS.3500/22	22	88 LPS	3.50	2.95	375
SHS.3500/23	23	92 LPS			
SHS.3500/24	24	96 LPS			
SHS.3500/25	25	100 LPS			
SHS.3500/26	26	104 LPS			
SHS.3500/27	27	108 LPS			
SHS.3500/28	28	112 LPS			
SHS.3500/29	29	116 LPS			
SHS.3500/30	30	120 LPS			
SHS.3500/31	31	124 LPS			
4000 SERIES					
SHS.4000/32	32	128 LPS	4.00	3.25	375
SHS.4000/33	33	132 LPS			
SHS.4000/34	34	136 LPS			
SHS.4000/35	35	140 LPS			
SHS.4000/36	36	144 LPS			
SHS.4000/37	37	148 LPS			
SHS.4000/38	38	152 LPS			
SHS.4000/39	39	156 LPS			

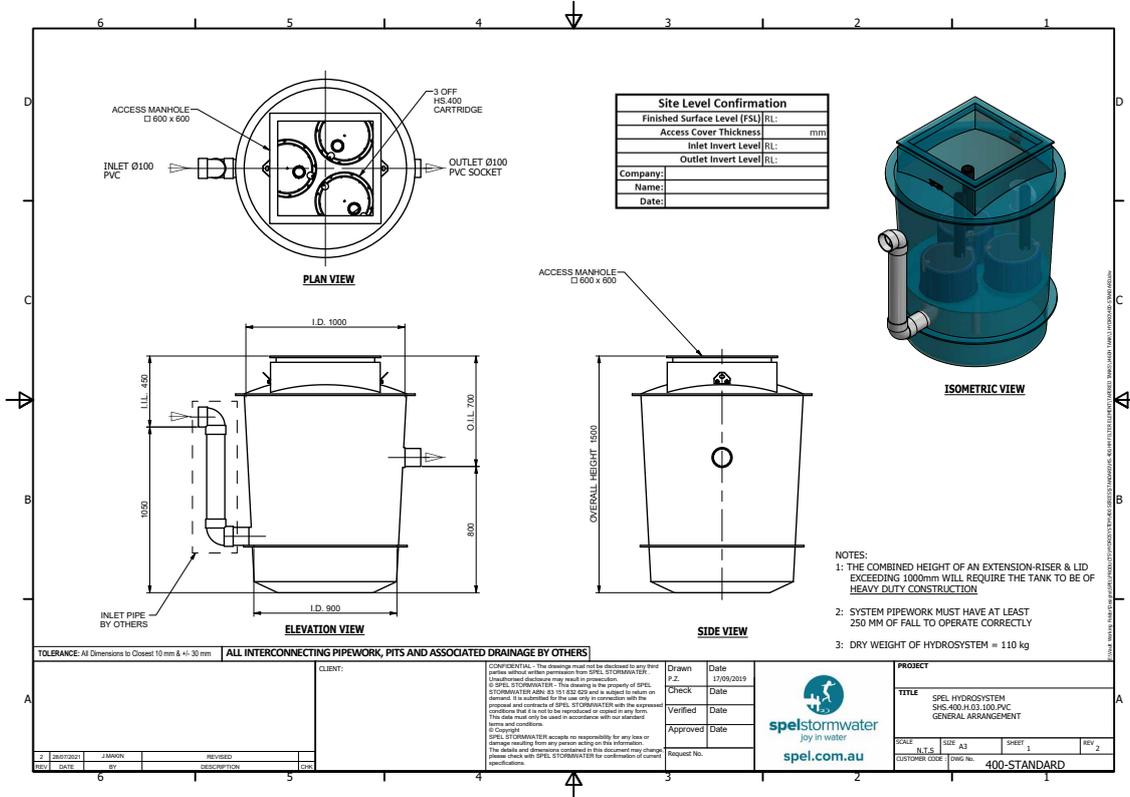


Operating System

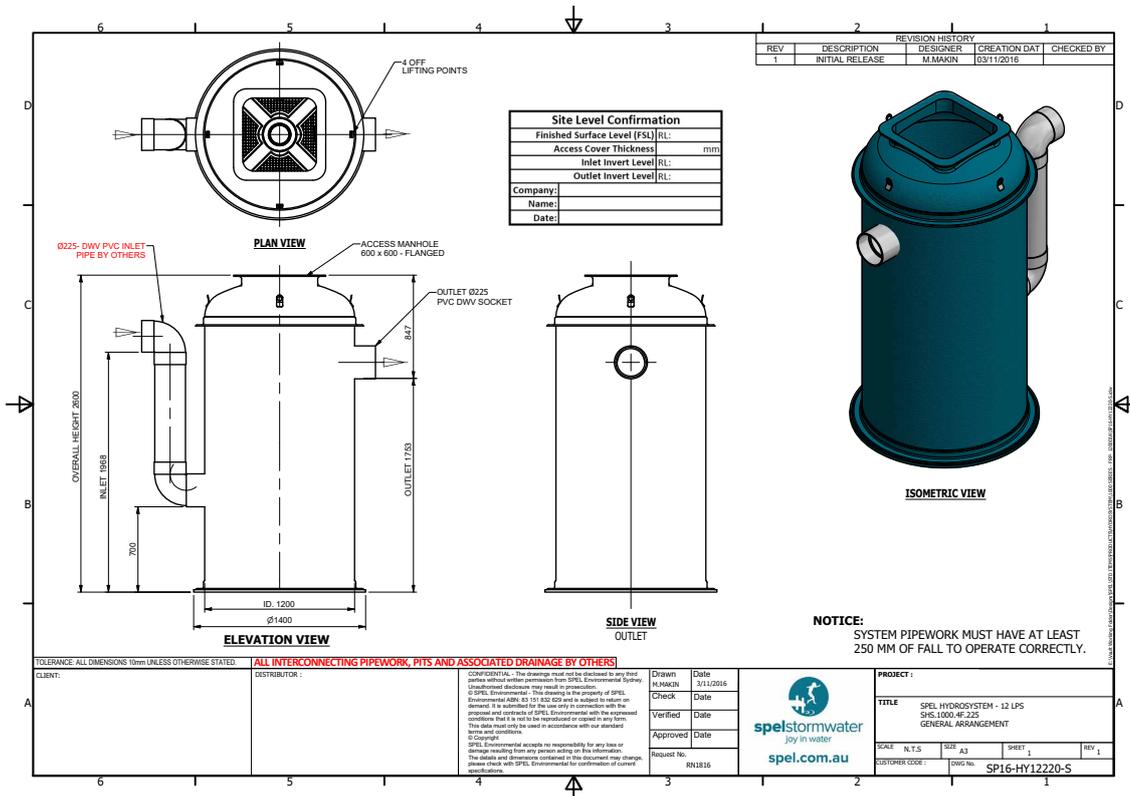
1. The Stormwater from the catchment enters the hydrosystem via PVC inlet pipe.
2. Heavy sediment is retained within the sump area.
3. Filter elements are located in the tank. With these filter elements, the fines are filtered in an upflow process and most of the dissolved pollutants are precipitated and adsorptively bound. The filter can be backflushed from above and can easily to be replaced in the event of it becoming fully contaminated.
4. The clean water is situated above the filter elements; flows out the outlet.

DRAWINGS

Model 400

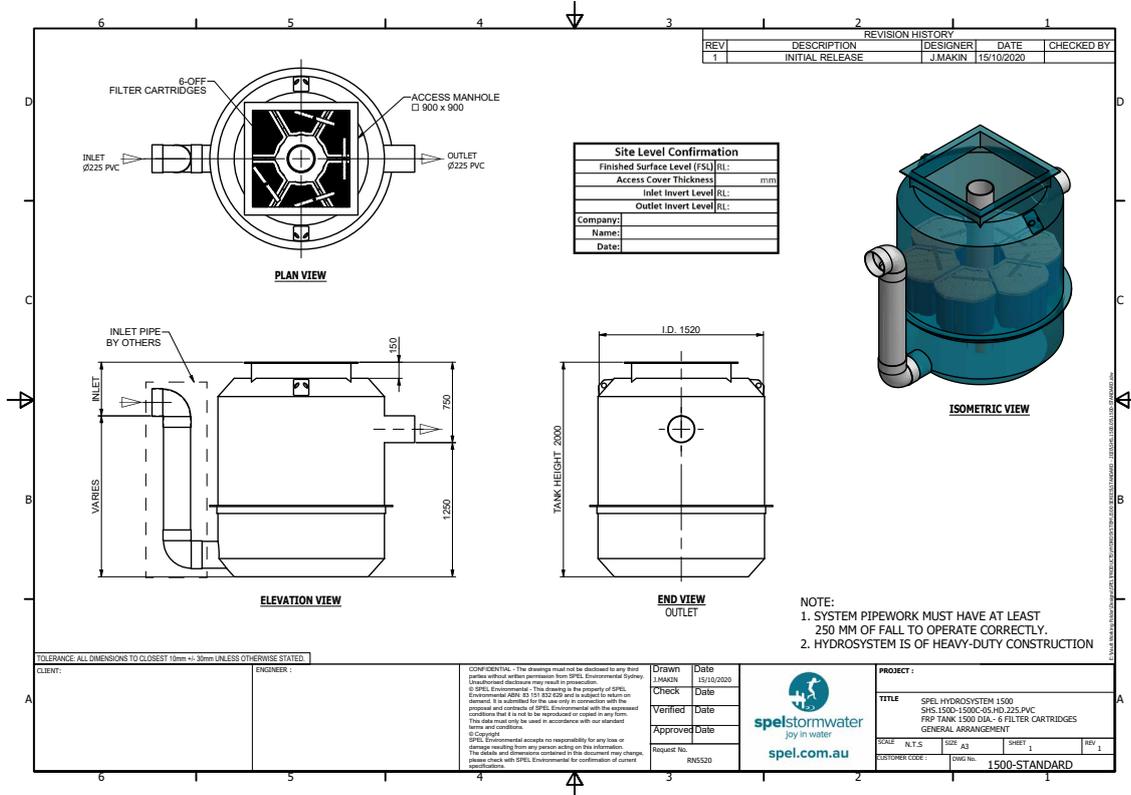


Model 1000

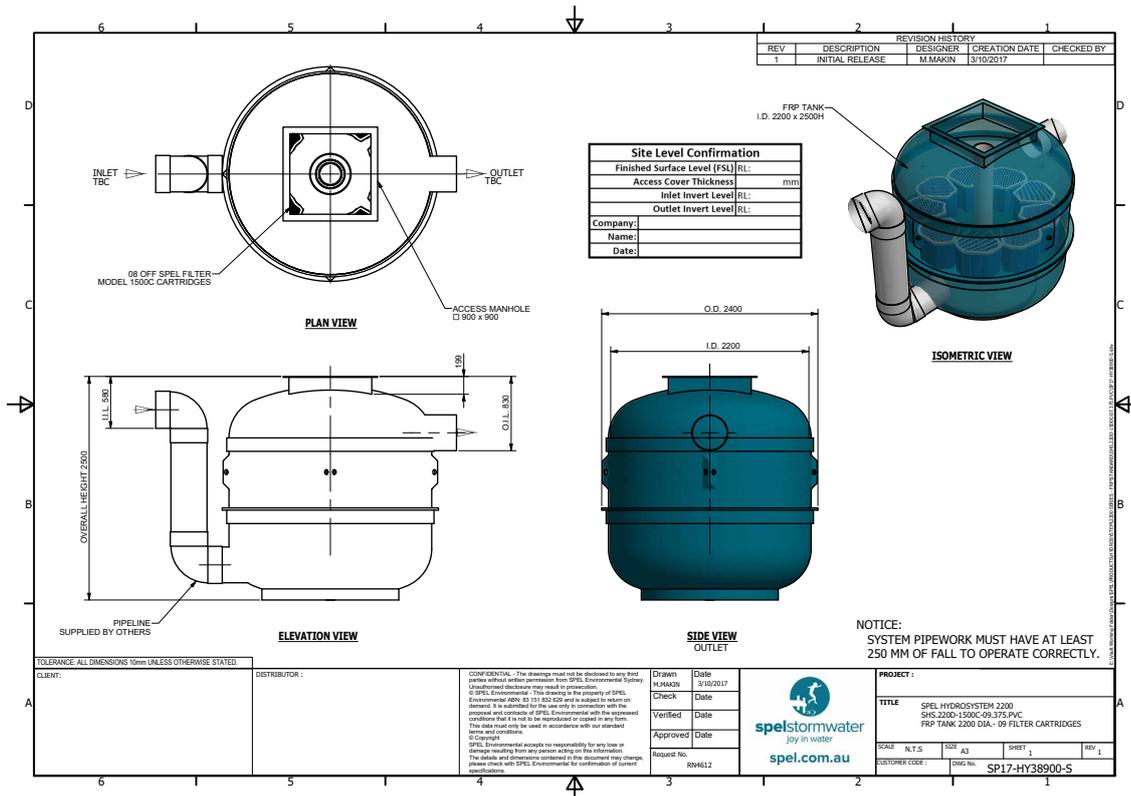


DRAWINGS

Model 1500

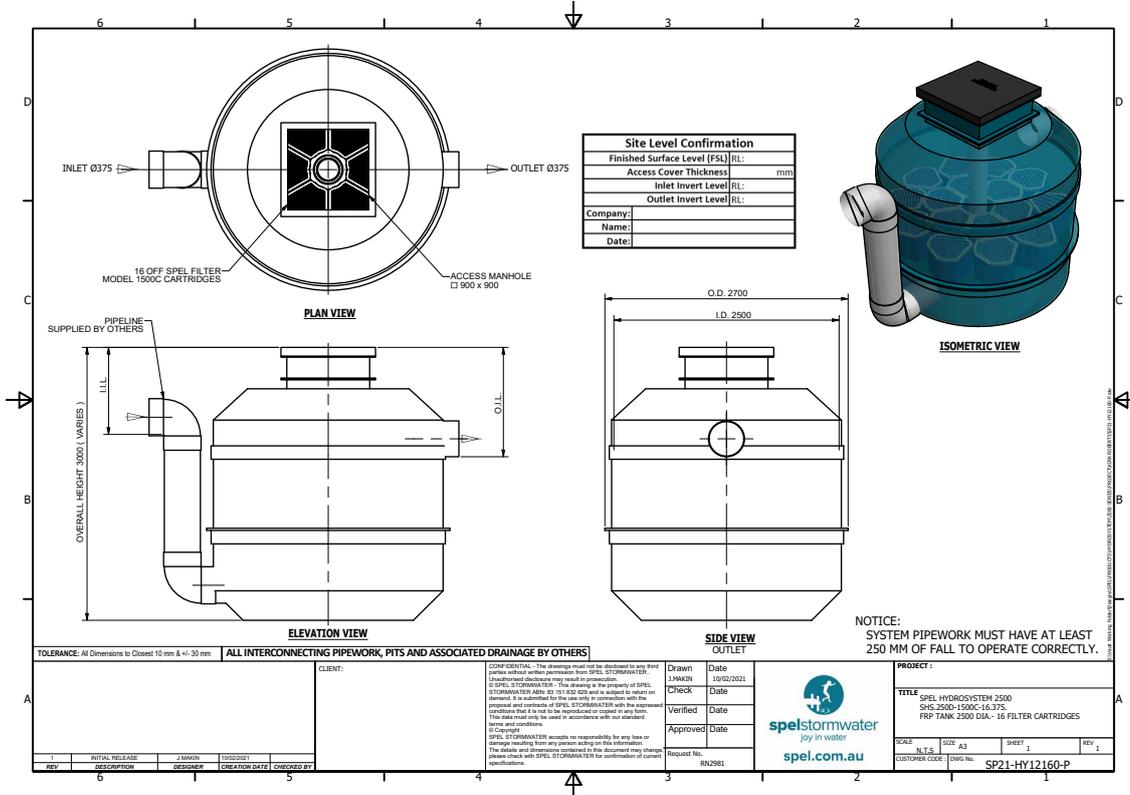


Model 2200

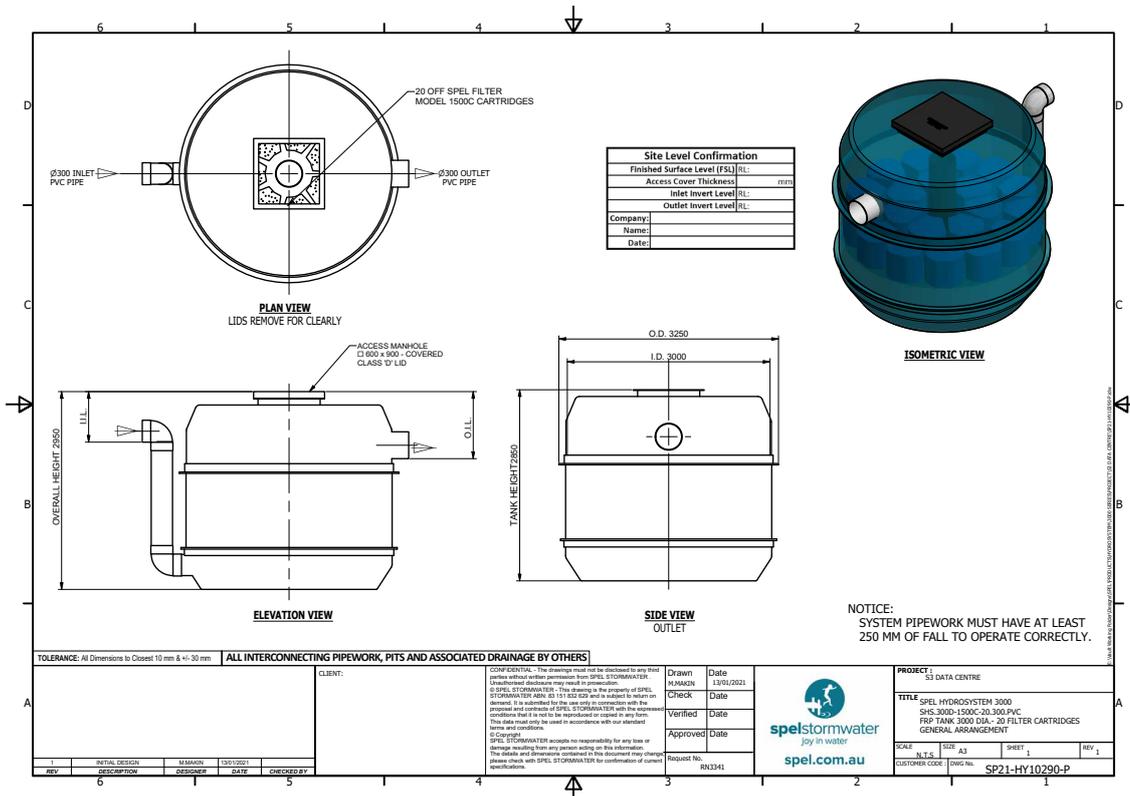


DRAWINGS

Model 2500

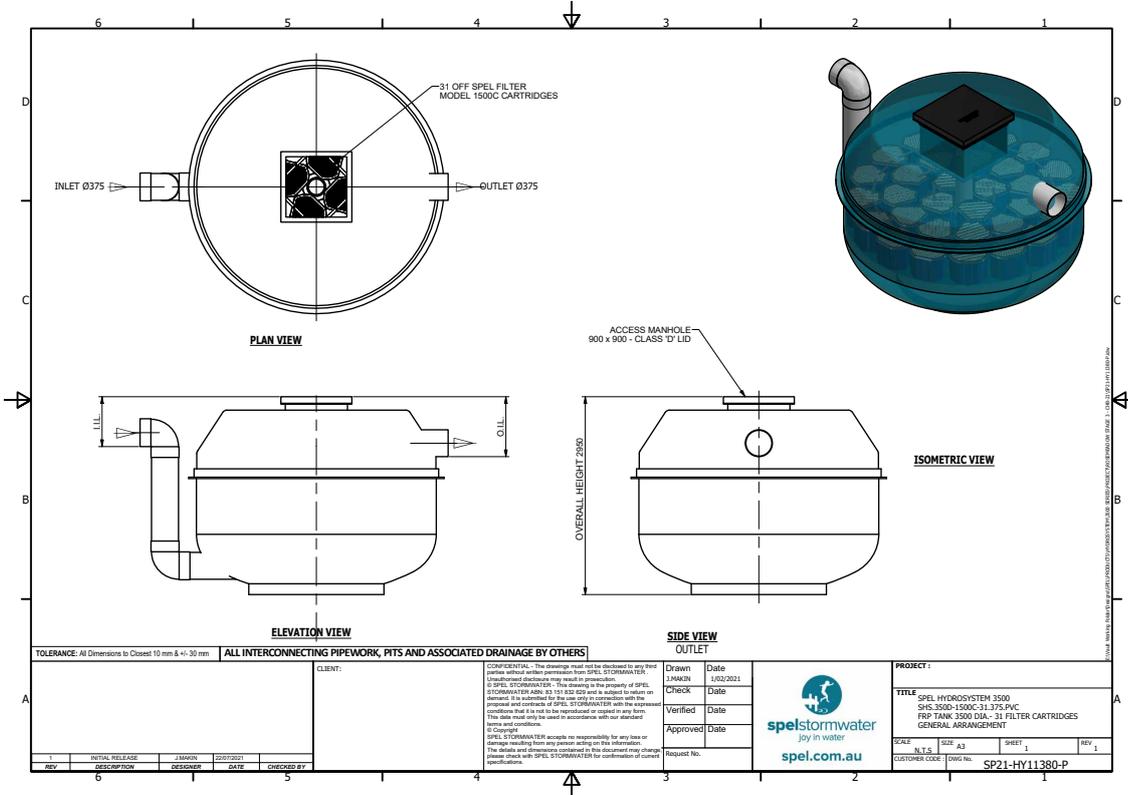


Model 3000

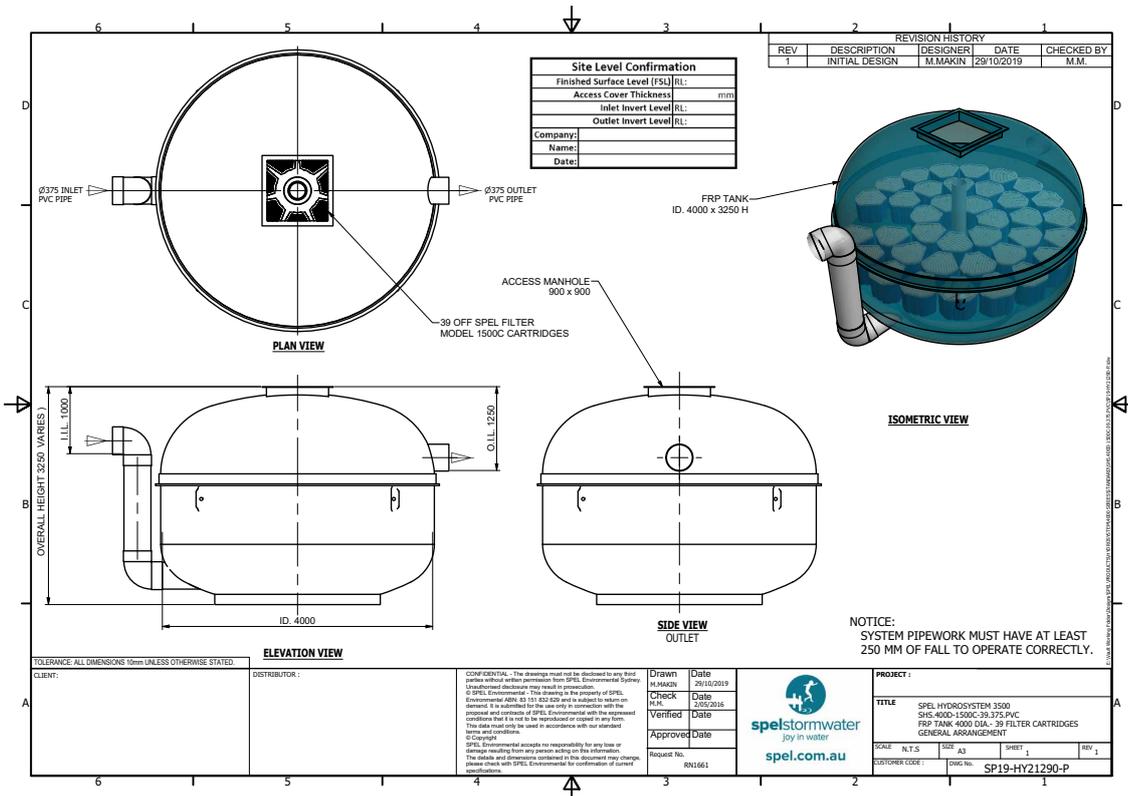


DRAWINGS

Model 3500



Model 4000



SPEL Hydrosystem

Cartridge filter for tertiary stormwater treatment

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

Phone: (02) 8705 0255

Email: sales@spel.com.au

spel.com.au

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.