HANCOR BAYFILTER™ STORMWATER FILTRATION SYSTEM

With over seven years in research and development, BayFilter is the most efficient, effective, economical, and easy-to-use stormwater treatment filter on the market today.

Utilizing concrete (manholes, pre-cast, or cast-in-place) vaults, an easy-to-handle cartridge design, a proven mixed media sand filter, and a proprietary spiral wrapped layered construction, BayFilter removes very fine sediment and nutrient pollutants at an astounding maximum flow of 30 GPM per cartridge. The vertically spiralled silica-sand layered design maximizes flow rates while up-flow filtration yields more effective pollutant removal and allows for BayFilter’s unique hydrodynamic backwash cleansing process. This process dislodges pollutants and restores the porosity of the mixed media filter. Dedicated drain-down devices assure no standing water between storms.

FEATURES & BENEFITS

• BayFilter systems remove 85% Total Suspended Solids (TSS) and 65% of turbidity.
• Easy to specify, install, and maintain.
• Available in three different configurations (manhole filter, precast vault filter and cast-in-place vault filter)
• Systems are fully customizable
• Cartridges are capable of removing 65% of the total phosphorus load.
• Cartridges may be recycled.
• Drain-down cartridge allows manhole vault to empty even after siphon has broken and standard cartridges are not engaged.
• Excellent abrasion and corrosion resistance
• Reduced life cycle costs
• Customizable systems meet the needs of each specific project
• Low maintenance costs
• Reduces mosquitoes and other diseases from breeding within the system
• Prevents system from becoming anaerobic during dry periods
HANCOR BAYFILTER STORMWATER TREATMENT SYSTEM SPECIFICATIONS

INTERNAL COMPONENTS

• Precast Concrete Vault: Shall be provided according to ASTM C478, C858, and C1433. Precast concrete vaults shall be provided by BaySaver Technologies, Inc.

• PVC Manifold Piping: All internal PVC pipe and fittings shall meet ASTM D1785. Manifold piping shall be provided to the contractor partially pre-cut and pre-assembled.

• Filter Cartridges: External shell of the filter cartridges shall be substantially constructed of polyethylene or equivalent material. Filtration media shall be arranged in a layered fashion to maximize available filtration area. An orifice plate shall be supplied with each cartridge to restrict flow rate to a maximum of 30 gpm.

• Filter Media: Filter media shall be by BaySaver Technologies Inc. Filter media shall consist of the following mix. Sand media shall have an effective particle size of not more than 0.49 mm, it shall have an angular grain shape, a hardness of 7, be 99% silica, and not leach nutrients. The media shall also include a blend of Perlite and Activated Alumina.

• Flow Spreader/Energy Dissipator: Shall be constructed of polyethylene or equivalent material.

PERFORMANCE

• The stormwater filter system shall be an offline design capable of treating 100% of the required treatment flow at full sediment load conditions.

• The stormwater filter system’s cartridge units shall have no moving parts.

• The stormwater treatment unit shall be designed to remove at least 85% of total suspended solids, 65% of total phosphorus, 65% of turbidity, 60% of total copper and 60% of total zinc based on field data collected in compliance with the Technology Acceptance Reciprocity Partnership Tier II test protocol.

• The stormwater filtration system shall reduce incoming turbidity (measured as NTUs) by 65% or more and shall not have any components that leach nitrates or phosphates.

• The stormwater filtration cartridge shall be equipped with a hydrodynamic backwash mechanism to extend the filter’s life and optimize its performance. Inlet flow shall be upflow.

• The stormwater filtration system shall be designed to remove a minimum of 65% of the incoming Total Phosphorus (TP) load.

• The stormwater filtration system’s cartridge units shall have the following minimum flow and sediment load capacities:

<table>
<thead>
<tr>
<th>Design Flow per BFC—gmp</th>
<th>Treated Sediment Load for 80% Sediment Removal—lbs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>150</td>
</tr>
<tr>
<td>23</td>
<td>200</td>
</tr>
<tr>
<td>20</td>
<td>250</td>
</tr>
<tr>
<td>15</td>
<td>300</td>
</tr>
</tbody>
</table>

INSTALLATION

Installation of the BayFilter System(s) shall be performed per manufacturer’s Installation Instructions.