EcoStream™ BioFilter

EcoStream BioFilter is designed to capture and retain a variety of pollutants including sediment, nutrients, heavy metals, and hydrocarbons while helping to meet green infrastructure objectives. This high flow, low impact system incorporates the processes of sedimentation, filtration, adsorption, and biological.

Features

- High filter media area and flow rate
- Low elevation change between inlet and outlet
- Superior pollutant removal rates
- Living plant component on the surface of the unit (optional)
- Internal bypass
- Optional external high flow bypass available in most configurations
- Multiple configurations to meet specific requirements
- Scalable systems allow for treatment rates starting at 66 GPM (NJDEP) and 50 GPM (WSDOE) within a single structure
- Curb inlet or piped inlet options
- Easy and cost effective to maintain

Benefits

- Compact footprint without sacrificing treatment capacity
- Can utilize regional plant life in the plant growth section
- Simple, efficient, cost-effective design
- No confined space entry required for inspection or maintenance
- Supports designs both with and without a plant growth section providing greater design flexibility for the engineer

State of Washington TAPE GULD Basic Enhanced/Metals Phosphorus

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

NJCAT Corporation for Advanced Technology

ADS

EcoStream BioFilter Specification

Materials and Design

- Concrete Structures: Designed for H-20 traffic loading and applicable soil loads or as otherwise determined by a Licensed Professional Engineer. The materials and structural design of the devices conform to ASTM C857 and ASTM C858.
- Internal components include a proprietary media blend, recycled polyethlyene underdrain piping, crushed rock, and mulch.

Performance

- The EcoStream BioFilter can be designed as an online unit capable of treating the design storm event and can internally bypass peak storm events.
- NJDEP certified. EcoStream Biofilter can remove greater than 85% of TSS and 84% of Phosphorus.
- WSDOE GULD approved for basic, metals, and phosphorus treatment. EcoStream Biofilter can effectively remove 85% of TSS, 70% of TP, 39% of copper and 65% of zinc.

		NJCAT/NJDEP		WSDOE GULD
EcoStream Model	Media Bay Size (ft x ft)	Treatment Rate cfs (L/s)	Mass Capture Capacity lb (kg)	Treatment Rate cfs (L/s)
ES16	4 x 4	0.147 (4.2)	271 (123)	0.111 (3.1)
ES24	4 x 6	0.221 (6.3)	407 (185)	0.167 (4.7)
ES32	4 x 8	0.294 (8.3)	542 (246)	0.223 (6.3)
ES36	6 x 6	0.331 (9.4)	610 (277)	0.251 (7.1)
ES40	4 x 10	0.368 (10.4)	678 (308)	0.279 (7.9)
ES48	4 x 12 or 6 x 8	0.441 (12.5)	813 (369)	0.334 (9.4)
ES60	6 x 10	0.551 (15.6)	1016 (461)	0.418 (11.8)
ES72	6 x 12	0.662 (18.7)	1220 (553)	0.501 (14.1)
ES80	8 x 10	0.735 (20.8)	1355 (615)	0.557 (15.7)
ES96	8 x 12	0.882 (25.0)	1626 (738)	0.668 (18.9)
ES112	8 x 14	1.029 (29.1)	1897 (860)	0.780 (22.0)
ES128	8 x 16	1.176 (33.3)	2168 (983)	0.891 (25.2)

Installation

EcoStream should be activated after a site is stabilized to prevent uncontrolled stormwater runoff from the construction site from entering the system. Installation of the EcoStream BioFilter unit(s) shall be performed per manufacturer's installation instructions. Such instructions can be obtained by calling Advanced Drainage Systems at (800) 821-6710 or by logging on to www.adspipe.com.

adspipe.com
800-821-6710