

THE ECOSTREAM BIOFILTER™ IS A BIOFILTRATION STORMWATER TREATMENT TECHNOLOGY THAT RELIES ON PHYSICAL, CHEMICAL AND BIOLOGICAL MECHANISMS TO REMOVE TOTAL SUSPENDED SOLIDS, TOTAL PHOSPHORUS, TOTAL NITROGEN, HEAVY METALS, OIL AND GREASE, TRASH AND BACTERIA.

Model	Vault Size (ft)	Media Filtration Area (sf)	Min Inlet to Outlet Depth <sup>1</sup> (in)	Overflow to Outlet Depth (in)	Design Treatment Rate (cfs)	Bypass Standpipe (in)	Tree Grate Size & Number
ES16E	4 x 4	16	32	32	0.111	6	3 ft (1x)
ES24E	4 x 6	24	32	32	0.167	6	3 ft (1x)
ES32E	4 x 8	32	32	32	0.222	6	3 ft (1x)
ES40E	4 x 10	40	32	32	0.278	6	3 ft (2x)
ES48E	4 x 12	48	32	32	0.333	6	3 ft (2x)
ES48E	6 x 8	48	32	32	0.333	6	4 ft (1x)
ES60E	6 x 10	60	32	32	0.417	8	4 ft (1x)
ES72E	6 x 12	72	32	32	0.500	8	4 ft (2x)
ES80E	8 x 10	80	32	32	0.556	8	4 ft (1x)
ES96E	8 x 12	96	32	32	0.667	10	4 ft (2x)
ES112E	8 x 14	112	32	32	0.778	10	4 ft (2x)
ES128E	8 x 16	128	32	32	0.889	10	4 ft (2x)

<sup>1</sup>A min drop of 29" can be used however the design engineer must review the 3" tailwater (up to the beehive bypass) on the inlet pipe to ensure it does not affect the project's overall design.

**NOTES:**

- UNDERDRAIN SHOWN IS SCHEMATIC ONLY. FOR DETAILS ON UNDERDRAIN SIZING AND LAYOUT SEE ECOSTREAM INSTALLATION GUIDE FOR DETAILS, KIT NUMBER AND PLACEMENT OPTIONS.
- WSDOE GULD APPROVAL APPLIES TO PLANTED OR PLANTLESS ECOSTREAM SYSTEMS.
- OPTIONAL FLEXSTORM INSERT TO MEET CASQA FTC REQUIREMENTS.

**ADS ECOSTREAM SPECIFICATIONS**

**PRODUCTS**

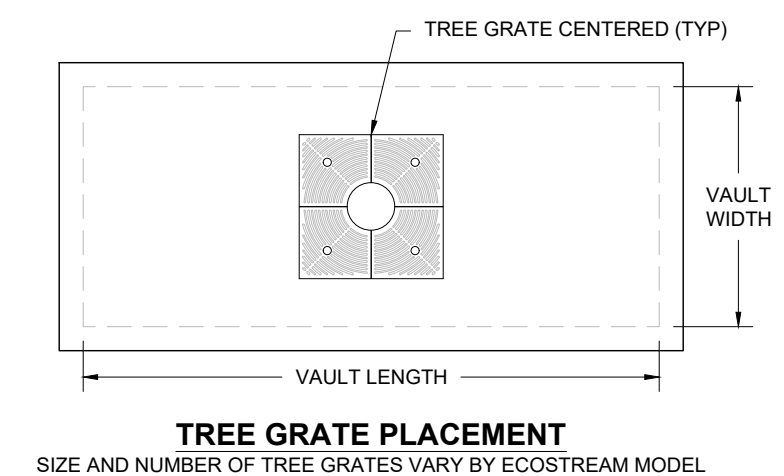
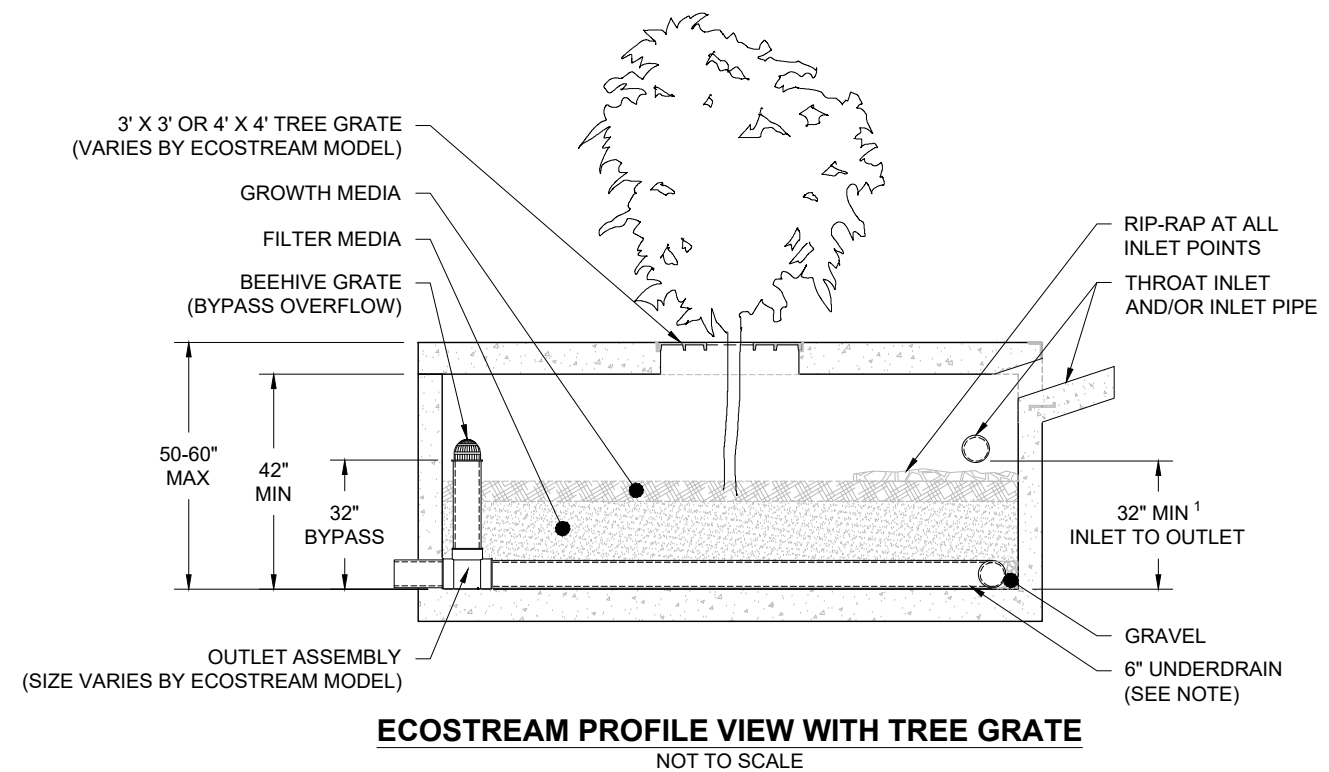
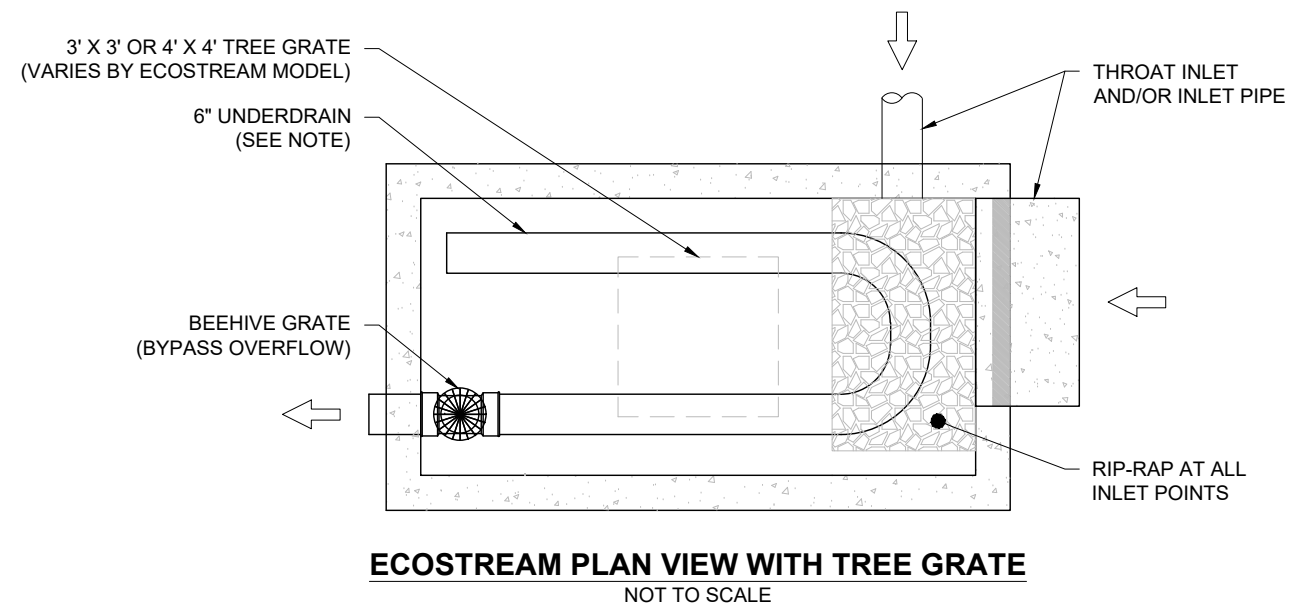
- A. INTERNAL COMPONENTS: SHALL BE SUBSTANTIALLY CONSTRUCTED OF RECYCLED POLYETHYLENE OR OTHER THERMOPLASTIC MATERIAL APPROVED BY THE MANUFACTURER
- B. FILTER MEDIA/VEGETATION: FILTER MEDIA SHALL BE BY ADS AND SHALL CONSIST OF A PROPRIETARY BLEND OF FILTER MEDIA. VEGETATION IS VARIABLE DEPENDENT ON REGION. ITEMS CHOSEN SHOULD ALIGN WITH CONTROLLING MUNICIPAL, COUNTY, OR STATE REQUIREMENTS.
- C. PRECAST CONCRETE VAULT: 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 SHALL BE PER ASTM C478, ASTM C857 AND ASTM C858.

**PERFORMANCE**

- A. THE STORMWATER FILTER SYSTEM SHALL BE AN ONLINE OR OFFLINE DESIGN BASED ON LOCAL REQUIREMENTS CAPABLE OF TREATING 100% OF THE REQUIRED TREATMENT FLOW AT FULL SEDIMENT LOAD CONDITIONS.
- B. THE STORMWATER FILTER SYSTEM SHALL HAVE NO MOVING PARTS.
- C. THE STORMWATER TREATMENT UNIT SHALL BE DESIGNED TO REMOVE AT LEAST 80% OF SUSPENDED SOLIDS, 62% TOTAL PHOSPHORUS, 35% DISSOLVED COPPER, AND 61% DISSOLVED ZINC.
  - SIZED AT A HYDRAULIC LOADING RATE OF NO MORE THAN 3.125 GALLONS PER MINUTE PER SQUARE FOOT OF MEDIA SURFACE.
  - CONSTRUCTED WITH A MINIMUM MEDIA THICKNESS OF 5 INCHES OF GROWTH MEDIA AND 15 INCHES OF BIOFILTRATION MEDIA.

**ECOSTREAM INSTALLATION NOTES**

INSTALLATION OF THE STORMWATER TREATMENT 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.ADS-PIPE.COM](http://WWW.ADS-PIPE.COM).



**ECOSTREAM BIOFILTER**  
**TREE GRATE INSTALLATION**  
**ENHANCED MEDIA**  
 DATE: 08/23/24 DRAWN: JLM CHECKED: SMW  
 DRAWING #: 570-110  
 DESCRIPTION: 4x8x4x10 JLM DRWN CHKD 09/12/24 DATE

**EcoStream™ Biofilter**  
 Stormwater Media Filters  
 4640 TRUEMAN BLVD  
 HILLIARD, OH 43026  
**ADS**

THIS DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED TO ADS/FORMTECH UNDER THE DIRECTION OF THE PROJECT'S ENGINEER OF RECORD (EOR) OR OTHER PROJECT REPRESENTATIVE. THIS DRAWING IS NOT INTENDED FOR USE IN BIDDING OR CONSTRUCTION WITHOUT THE EOR'S PRIOR APPROVAL. EOR SHALL REVIEW THIS DRAWING PRIOR TO BIDDING AND/OR CONSTRUCTION TO ENSURE THAT THE PRODUCT(S) DEPICTED AND ALL ASSOCIATED DETAILS MEET ALL APPLICABLE LAWS, REGULATIONS, AND PROJECT REQUIREMENTS.

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