

MediRevv Biofiltration System Case Study



The Midwest's Most Trusted Site Solutions Provider

Project: MediRevv Facility

Salesperson: John Parenza

Location: Coralville, Iowa

Owner: MediRevv

Application/Solution:

Engineer: MMS Consultants

Focal Point High Performance

Contractor: Stevens Landscaping

Modular Biofiltration System

Installed: July 10, 2014

Market Sector: Private Commercial

case study



case study

Challenge

We were first approached about our Focal Point High Performance Biofiltration System after the 2013 Clean and Green Sustainability Conference and Expo for this project to retrofit an existing 2,000 sq.ft. bioretention cell that wasn't performing properly. Sediment clogged the biofiltration aspect of the basin and it did not work as intended. We provided a preliminary design proposal based on the drainage information provided for the site.

Solutions

It was suggested to retrofit the existing basin with 40 square feet of the Focal Point High Performance Biofiltration System. During an initial meeting on the details of the retrofit, the engineer and general contractor brought up that a 2nd MediRevv building was going to be built later that year on the same site. We realized that we would be better off designing the system based on the upcoming construction of the 2nd office building. In October of 2013, MediRevv broke ground on a 26,200-square-foot building to accommodate its growing work force. It was determined appropriate to wait until completion of that building and then install the system and commission it once stabilization had taken place to the surrounding area.

In August of 2014, Stevens Landscaping along with John Parenza from Quick Supply installed a much larger system since the drainage was expanded. 260 sq.ft. of Focal Point was installed in 1 days time. It was sealed off from use with a non-woven geotextile to keep sediment from causing damage to the system. The system is guaranteed to drain water at 100 inches per hour as defined in the "Rub-I Infiltrometer test, Determining In Situ Hydraulic Performance of High Flow Rate Bioretention Media".

Results

On September 25th, the geotextile was removed, along with a great deal of sediment, and the filter was commissioned. The system passed the Infiltrometer test with flying colors.



1 Gravel base in place and laser leveled.



2 Atlantis Raintank underdrain installed to handle the high flow media.



3 Micromesh separator still exposed as washed pea gravel placed on top.



MediRevv Biofiltration System Case Study continued



Products

Manufacturers included in solutions and product:

Product:
Focal Point HP-MBS

Manufacturer:
Convergent



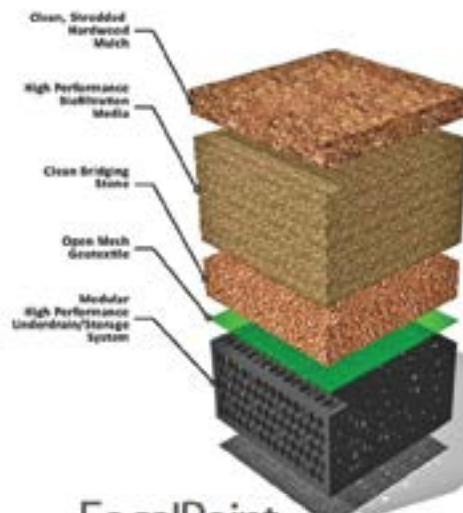
4 Final grading of the media is taking place before mulch installed.



5 Mulch is being installed while hydraulic conductivity test is being performed to insure flow rates.



6 Since ground around Focal Point is not stabilized, the system is completely sealed off to keep sediment from plugging system.



7 After sodding, the system was opened up, tested again for flow, and "commissioned" for use.

Company Information

ASP Enterprises, Inc. and Quick Supply Co. For more than three decades, A.S.P. Enterprises and Quick Supply Co. has served the erosion control industry with integrity and expertise. We provide engineers and landscape contractors the exceptional value for their money and have grown to become the Midwest's full-line distributor of erosion-control, geosynthetics, storm water management products, wall block, landscape pavers, and drainage products.

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