

Brookline Place Redevelopment

Stormwater Management & Erosion/Sediment Protection during Construction

Building Demolition Phase

- Perimeter of work zone to be protected with silt barriers
- Drain inlets to be protected with silt sacks
- Dust controls measures to be implemented

Temporary Parking Phase

- Perimeter of work zones and temporary parking to be protected with silt barriers
- Drain inlets to be protected with silt sacks
- Dust controls measures to be implemented
- Sediment control Best Management Practice (BMP; Vortechs) to be installed to capture sediments from temporary parking
- Existing on-site inlets plus new inlets will convey drainage through treatment
- Temporary surface to be pervious – no expected increase in stormwater flows from site during temporary parking phase

Building Construction Phase

- Perimeter of work zone to be protected with silt barriers
- Drain inlets to be protected with silt sacks
- Dust controls measures to be implemented
- Sediment control Best Management Practice (BMP; Vortechs) already installed to capture sediments
- Existing on-site inlets plus new inlets will convey drainage through treatment; existing drainage infrastructure will be replaced with new infrastructure during the construction phase

Final Condition

- Best Management Practice (BMP; Vortechs) treatment unit will remove sediments and associated nutrients
- Surface conditions will have same general pervious/impervious composition – no expected increase in stormwater rates and volumes
- Top deck of parking structure will drain through an oil/gas separator prior to discharge through the BMP; covered portions of the garage will be sent through a different oil/gas separator prior to discharge to the sanitary sewer as required by code
- A bioretention/rain garden area will be provided for enhanced treatment of surface runoff between the garage and the 1 BP expansion

The Vortechs system's swirl concentrator and flow controls work together to create a low energy environment, ideal for capturing and storing fine particles and other pollutants of concern. With comprehensive lab and field testing, the system delivers proven results and site-specific solutions.

Features & Benefits

Shallow Profile

- Easy and cost-effective installation, especially on sites with high groundwater or bedrock
- Typical invert only 3 feet below pipe

Effective Fine Solids Removal

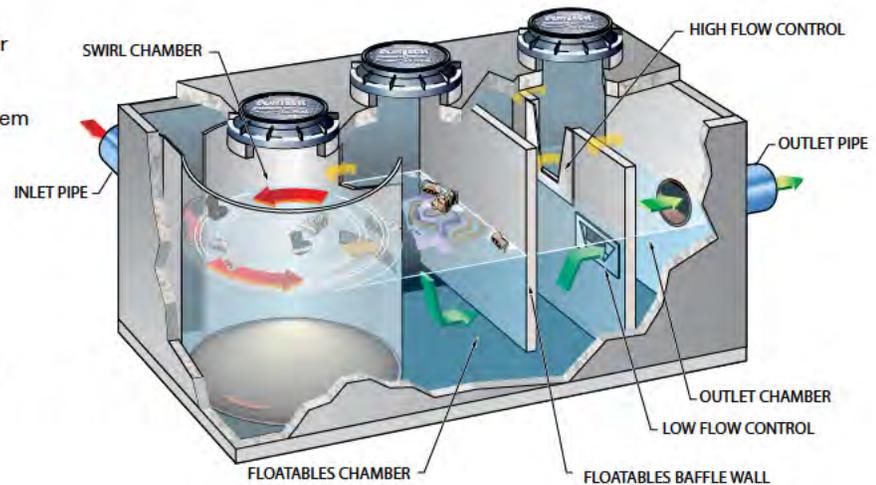
- Large swirl chamber – Enhances very fine particle removal (down to 50 microns)
- Flow controls reduce inflow velocity and increase residence time
- Largest treatment zone surface area of any swirl concentrator system available

Easy Maintenance

- Unobstructed access to stored pollutants
- Sealed swirl chamber decreases clean-out volume

Proven Performance

- Performance verified by NJ CAT and WA Ecology



Large diameter swirl chamber for enhancement of sediment removal in a low profile unit

Our systems are widely accepted for effective solids removal ❖ ❖ ❖