Installed By: Northwest Rain Solutions, LLC
Location: Georgetown Seattle, WA
Stormwater Management:Rainwater Harvesting
Pre-filtration: WISY 6" prefilter

Problem: Elysian Brewery located in Georgetown Seattle expanded its warehousing into a new building next door but needed to manage on-site peak flow of rainfall from the 33,000 square foot impervious roof during rain events. There was little room to include a bio-retention or other form of stormwater management onsite. The best option for managing the runoff was to incorporate rainwater harvesting systems to retain the initial peak flow from rain events. This would be stored in the tanks with the initial rain but slowly drain to the municipal stormwater system over a period of time, emptying the tank for the next rain event.

Three rainwater harvesting systems were designed on the site to retain more than 27,000 gallons of peak flow, which slowly drains through ½" orifices located in each tank. The orifices are located 12" above the floor of the rainwater catchment tanks. This provides "dead storage" where the bottom 12" of rainwater at the bottom of the tank settle additional sediment.

End Result: The three rainwater systems reduce the overall impact of the peak flow of runoff from the new commercial building

- Two 5,000 gallon Plastic Tanks located in the back of the warehouse. Manages more than 10,000 square feet of roof area.

- The downspout from the roof is directed to a 6" WISY vortex pre-filter that removes the large debris from entering the tanks.

The Plastic tanks are set side by side and connected at the bottom with a 3” pipe. When one tank fills the rainwater equalizes to the other tank through this pipe

- There is a ½” orifice at the bottom of each tank 12” up from the bottom.
- The Corrugated steel tank is assembled on the concrete pad at the entrance of the new building.

- The top ring and roof is assembled over the concrete pad.

- The tank is lifted from the roof to add additional rings. Each panel is bolted onto the bottom of the top ring

- The corrugated steel tank has a capacity of nearly 12,000 gallons that retains the stormwater runoff from more than 15,000 square feet roof area.