GURRENTS

Threadbare Cider House in Spring Garden Paves the Way to Better Stormwater Management







Pictured left: Alex Grelli, Co-founder of Threadbare. Above right: GeoPave permeable paving solution. Below right: MM Mara Construction installing paving.

When considering plans for Threadbare Cider House, cofounders Alex Grelli and Mark Meyer and their contractor, Marty Marra of MM Marra Construction, Inc. entered the planning process with the intention of managing stormwater in a creative way. With two large spaces available on the property for parking, a decision was made against resorting to traditional asphalt paving of the lots. Instead, a plan was devised to use a permeable paving product solution that would ultimately reduce

Threadbare's impervious area from 25 equivalent residential units (ERUs) to 14 ERUs.

Threadbare's parking lot solution was installed in 2017 by MM Marra Construction and required only a loader to distribute limestone fill and laborers to do the work. Threadbare's lot has held up to changing seasons, delivery trucks, plows, and many visitors seeking delightful ciders and artisan pizzas over the years. The system has proven very durable and no observable ponding has

occurred during and after heavy rain events.

A porous gravel paving product system known as GeoPave was selected for Threadbare's parking lot areas. Installation of the GeoPave system involved compaction of the ground followed by a top layer of crushed limestone - creating a highly porous surface for water to filter through. The unique feature of the GeoPave system distinguishing it from a standard gravel lot is the lightweight, pliable 100% recycled plastic grid that is anchored into the ground to support and contain the gravel layer. This grid is remarkably durable once set in place and can support the weight of virtually any vehicle. While gravel lots may bring to mind recollections of fair grounds and festivals, complete with rocks being tossed about when departing the event, the grid of the GeoPave system feels remarkably solid under your tire, similar to traditionally paved surfaces.

In addition to the environmental aspects of this surface product, Threadbare was able to eliminate the need for a \$150,000 underground stormwater detention system.

Next Board Meeting: October 27

For more information and to join a PWSA Board Meeting, please visit pgh2o.com/board

For a complete list of PWSA's community meetings and events, please visit pgh2o.com/events-meetings.

In addition to opting for permeable parking, you will notice native plants smartly placed around the property which excel at further absorbing stormwater, all while bringing charm to the property.

By replacing traditional impervious surfaces with permeable pavers, property owners can effectively reduce stormwater runoff and ultimately lower their stormwater fee. The benefits of permeable lots extend beyond individual stormwater management as well. Allowing rainwater to infiltrate into the ground helps replenish local groundwater resources and moreover, mitigates the "urban heat island" effect by reducing surface temperatures. This reduces overall energy demands while making the surrounding areas more comfortable for pedestrians.

Threadbare Cider House, operated by Pittsburgh Spirits, stands out as an example of a business that is paving the way to a more environmentally-conscious future. To learn more about how you can reduce your stormwater fee and make a positive impact with your stormwater management practices, visit: pgh2o.com/stormwater-fee.

Join our email list to get the latest news and updates. Signing up is simple at pgh2o.com/subscribe.





Explore the resources below for additional information about the stormwater fee, the stormwater credit program, and a searchable map to understand the amount of hard surface on your property.

Stormwater Credit Program: Property owners choosing to manage stormwater on site may reduce their monthly stormwater charge by installing stormwater management systems such as a rain garden or an underground stormwater system on their property. For information about the stormwater credit and to apply visit pgh2o.com/stormwater-fee.

Fee Finder Website: Use our searchable map to view the amount of impervious surface on your property and understand your stormwater fee. To use the site:

- · Launch the Fee Finder Website
- · Enter your address in the search bar and press enter
- Click inside the boundaries of your property for the amount of impervious surface and Equivalent Residential Units (ERU's)
- To determine your fee amount, multiply the number of ERU's by the current stormwater rate and subtract any credits that may apply

Disputing Stormwater Fee: If you have questions about the amount of impervious surface calculated for your property or believe there is a discrepancy, please contact our Customer Service department by calling 412-255-2423 (Press 5), to start the process.

Questions: Please call PWSA Customer Service at 412-255-2423 (Press 5) or email info@pgh2o.com for questions about the stormwater fee or general questions about the credit program. For more information about our plans to manage stormwater, please visit pgh2ostormwater.com.

Neighbors Helping Neighbors

Your donation to PWSA's Hardship Grant Program will directly benefit PWSA customers having difficulty paying their bill. Donate online at pgh2o.com/give.

Enroll in eBilling

Convenient and easy to use, our online billing and payment portal ensures timely delivery of bills and payments. Visit pgh2o.com/ebilling to enroll.

Penn Liberty Plaza 1 1200 Penn Avenue Pittsburgh, PA 15222 Customer Service*

T 412.255.2423 (Press 5)
info@pgh2o.com

Emergency Dispatch* 412.255.2423 (Press 1) Available 24/7





@pgh2o





Keep Leaves Out of Storm Drains!



Leaves and grass clippings left on the ground can clog storm drains and sewer pipes and, consequently, contribute to street flooding when it rains. Yard waste and most fertilizers can cause nutrient pollution and oxygen depletion in our streams and rivers when carried through storm drains and sewers. This hurts our waterways and the wildlife that rely on them.

Help protect our water and sewer resources by following these tips:

- Do not rake or blow leaves or grass clippings into the street.
- Do not dump yard waste or trash near or into storm drains
- Place your leaves in a bag for curbside yard debris collection or compost them at home.
- If you have a mulching lawnmower, use it to recycle leaves and their nutrients into your lawn.
- Only apply fertilizers or pesticides if necessary and do not overapply.
- Use slow-release and organic fertilizers, which are less likely to wash away.
- Fertilize lawns in the fall to prevent nutrients washing away during spring rains.

If you see a clogged or broken storm drain, please call our 24/7 Dispatch at 412-255-2423 (Press 1), contact us @pgh2o on Twitter, or fill out a webform at Pgh2o.com/report-an-issue.