# Saniflo **©SFA**

STUDIES CASE PROJECT Humanitarian organization Showering Love expands offering of restroom-shower facilities

# Originally a tour bus, *Faith* is now equipped with a new bathroom, three new showers and laundry facilities

"When I got my own life back on track, I reached out to the community and shared my ideas," explains Albaugh, who serves as president of Showering Love. "The community jumped on board, and it all came together very quickly."

Incorporated in 2016, Showering Love soon after built its first bus, called Grace. to provide showers and private restrooms in a mobile setting. Formerly a city bus, the vehicle has an interior measuring 320 square feet.

When looking to build entirely selfsufficient bathrooms and showers on the bus in a way that would accommodate numerous guests day after day, Gifford conducted intensive research and came upon Saniflo's above-floor plumbing technology. Critical to Showering Love's effectiveness is having the ability to meet guests where they are - without having to hook up to municipal water, septic and electric.

According to Albaugh, introducing Faith to Showering Love's mission is a dream come true. Originally a tour bus, Faith is now equipped with a new bathroom, three new showers and laundry facilities. "This has been a community project." says Albaugh. This bus, ultimately, is being created in Rowdy's honor and

these gentlemen are making it happen." Drainage for all these new facilities is provided by three donated **Sanishower** drain pumps and a **Sanibest Pro**. Both the black water from the bathroom's toilet and grav water from the sinks. showers, and washing machines are pumped into a 300-gallon blackwater tank, located in the under-storage area of the bus.

Regarding the **Sanishower** as the best product solution for this installation. Abruscati and Saunders installed the three units to handle drainage from the showers. The gravity feed from the freshwater tank permits a 10-minute shower in full privacy.

Abruscati regards the **Sanishower** as a very user-friendly product. "It's simple to connect and definitely easy to install. The plumbing installation took about 20 hours in total, including the addition of supply lines. I think it is a really good product and something I'll be sure to use in the future."

Since the unveiling of Grace four years ago. Showering Love has provided over 50,000 showers to the homeless with only that first bus. "Showering Love wouldn't exist without Saniflo," says Albaugh. "We wouldn't be able to do what we do." Thanks to the latest donations from Saniflo and others. Showering Love is determined to do even more!





**CHALLENGE** 

Without the assistance of

gravity, all showers needed

a compact pump system to

discharge the water into the

holding tank several

feet away.

Pump systems would need

to be able to keep up with

the incoming flow rate

and usage as the shower

facilities would be used

several times

throughout the day. 

Sanishowe





Equipped with three donated Saniflo Sanishower drain pumps and one Sanibest Pro grinder pump, the newly refurbished Showering Love bus, Faith, becomes the nonprofit's second vehicle to provide those in need with one of life's basic amenities.

Left to right, Robbie Abruscati and Robert Saunders preparing installation of Saniflo Shower.

For the complete case study, please scan QR



Manufacturer finds stronger, more-efficient pressure pump for new washer-extractor unit

# **Optimizes the production efficiency** of a prototyped machine to coat garments in mass quantities

Eastern Tech specializes in manufacturing "pretreatment" chemicals for digital printing on t-shirts and garments. To optimize production efficiency, the company prototyped a machine to coat garments in mass quantities. This process is called "Washer-Extractor Processing for DTG Printing." which changes how the Direct-To-Garment [DTG] industry can apply pretreatment onto blank garments for digital printing. The technology lets the user load cotton garments into a larger commercialgrade washing machine called a "washer-extractor."

"Eastern Tech works directly with OEM partners, developing solutions for the market," says Eastern Tech's R&D Engineer Mark Pham. "We target Ink Innovations in everything that we do." With innovation top of mind, Eastern Tech looked to replace an existing drain pump used in the prototype's liquid reuse system. This, in turn, would result in a faster, more efficient process.

Pham's team searched for pressure drain pumps online and discovered Saniflo's Sanicom 1, a simplex drain pump designed for heavy-duty commercial applications. "The core value of the Saniflo pump to us was the ability to transfer fluid faster to increase efficiency and stabilize our system. Since the fluid moves faster, everything is more stable."

The one-horsepower **Sanicom 1** simplex drain pump is designed to pump gray water away from demanding commercial applications. The pump, which handles up to 194°F water, is designed to withstand liquids with highly acidic properties. The pump can drain multiple water fixtures simultaneously, discharging gray water up to 25 feet vertically and/or 250 feet

horizontally. Gray water enters through one of two side inlets before being pumped to the drain line.

After reviewing the functionality of the Sanicom 1. Eastern Tech felt confident it could be a great solution for their new washer-extractor prototype. The next step was to install the unit and run tests. According to Pham, the Sanicom 1 performed very well during the first testing prototype. Which is why the company also decided to test Saniflo's Sanicom 2. a heavyduty, duplex drain pump in their latest prototype.

Eastern Tech works with Saniflo as an OEM (Original Equipment Manufacturer) account. Since using the Sanicom 1 as part of the first prototype, the company has purchased twenty additional Sanicom pumps for their washer-extractor processing units.

"We decided to upgrade our product line with the **Sanicom 2** pump, which is part of why we set it up in the first place," explains Pham. "Every system is stable, and everything works well."



The pretreat coming from the washing machines flows into the Sanicom unit. The Sanicom pumps the liquid five feet via hose into the reuse tank connected to the washing machine.

For the complete case study, please scan QR



#### CHALLENGE

With innovation top of mind, Eastern Tech looked to replace an existing drain pump used in the prototype's liquid reuse system. The function of the drain pump is to pump the pretreat back into a tank.

After conducting research online, Eastern Tech discovered a modular drain pump solution that would provide stronger horsepower. This, in turn, would result in a faster, more efficient process.



Sanicom<sup>®</sup> 1

Avoids the costly job of busting through the concrete foundation of a floating home

# Install plumbing for a full bathroom and washing machine, using a compact lift station in a floating home

A floating home is a building, ranging from a tiny house to a four-story home, that floats on a body of water. Unlike a houseboat, a floating home is meant to be moved just once, placed on a floating concrete foundation, and permanently connected to public utilities; i.e., floating homes are permanently connected to municipal sewer, water, and electrical.

Installing conventional plumbing on a floating home can present some unique and formidable challenges. That's why the owner of a floating house enlisted the help of an engineer and a local professional plumbing company, AR Plumbing. The project's scope involved installing the plumbing for a toilet, shower, sink, and washing machine as part of remodeling the floating home.

Having installed a Saniflo macerating toilet in another floating house, Rodas recommended Saniflo's above-floor plumbing solution to the engineer. "After talking to one of Saniflo's regional sales managers, we identified the **Sanicubic 1** as the right product for the application," says Rodas. The **Sanicubic 1** is a pre-assembled simplex (single pump) grinder system, capable of discharging wastewater from multiple fixtures. The compact, heavy-duty lift station can move up to 50 gallons of effluent per minute. In addition, the highly durable plastic enclosure for its pump and grinding blade incorporates four different exterior inlets for incoming waste lines, as well as sophisticated controls and a monitoring system to mitigate servicing issues.

"We initially looked into installing a Liberty pump, but it would have been a difficult installation, while the **Sanicubic 1** is easier to install and way more compact," Rodas says. The **Sanicubic 1** was positioned in a small space under the floating home's wooden floorboard.

According to Rodas, the entire installation, including running drainage lines from the four fixtures, took only two days. After multiple tests, Rodas reports that the completed system is performing well. Saniflo was the only realistic alternative to conventional plumbing on the current market, according to Rodas, especially for a unique and demanding application like a floating home. "I'm mostly impressed by how quiet the pump is." he says.



The Sanicubic 1 positioned in a small space under the floating home's wooden floorboard. AR Plumbing owner and CEO Adelso Rodas and his team used two of the four inlets on the Sanicubic 1.

For the complete case study, please scan QR



The control panel of the Sanicubic 1 has a visual and audible alarm system (including a 15' wire).

#### CHALLENGE

AR Plumbing handles residential and lightcommercial plumbing projects. They could not bust through the floating home's concrete foundation to install conventional plumbing because of steel beams running through the concrete.

"Our engineer advised against it, because it would compromise the integrity of the concrete slab," he explains. We had to find an alternative, less costly method for draining the toilet, sink, shower, and washing machine.





ADA-compliant restroom trailers for temporary, but heavy use by the general public

Bathroom trailer manufacturer chooses

Saniflo above-floor macerating and grinder solutions for Super Bowl LV

# RAYMOND JAMES STADIUM

NW L

#### Ameri-Can Engineering, a portable restroom and shower manufacturer, has a reputation for building high-quality trailers for their customers. Once the portable restroom arrives at a customer's site, all that's needed is to hook the plumbing up to the water supply, and it is ready for use.

For reference, the 2021 Super Bowl – despite the restrictive conditions of the COVID-19 pandemic – still hosted approximately 22,000 fans. To meet the needs of the large number of people using the portable trailers in a short period. Ameri-Can chief operating officer Keegan Campbell chose abovefloor plumbing technology several years ago. Working with other above-floor macerators, the company experienced less-than-satisfactory results. Then Campbell happened upon Saniflo. "There was a bit of skepticism before using Saniflo, because we had tried other macerator companies and had experienced either failures or just poor customer service," he says. But after switching to Saniflo roughly five years ago, Ameri-Can Engineering has not looked back.

According to Campbell, "Saniflo products are the best solution for



The use of Saniflo products allows Ameri-Can Engineering to drop the back end of the trailers and pods to install an ADA-compliant ramp.

heavy commercial usage because they eliminate chances of clogging and pump failures." Ameri-Can's go-to plumbing solutions are the **Sanibest Pro** and the **Saniaccess 3**, because of their ideal fit into the trailers. However, the company has also worked with the **Sanishower** drain pump, the **Sanicompact** one-piece toilet with a built-in macerator, and the **Sanicubic 1** and **2** grinder systems for heavy-duty applications.

The **Sanibest Pro** is a heavy-duty grinder engineered to guickly dispose of larger objects that might well clog a conventional toilet, especially in a public setting. Another major benefit of working with Saniflo? The use of the **Saniaccess3** and the **Sanicompact** macerators, in particular, means the portable bathrooms meet ADA compliance and are wheelchair-accessible. In addition, the Sanicompact, a dual-flush toilet system used to create a half-bathroom. macerates toilet waste water as well while also discharging grav water from a sink. The self-contained unit with a builtin macerator is ideal for small spaces, such as trailers.

Campbell adds: "Saniflo units really hold their own when faced with high-volume usage in a large public gathering. The company also offers a broad range of reliable options for us to meet customer needs. The customer service and warranty support are also outstanding."



A look inside another trailer with the Saniaccess 3 installed.

For the complete case study, please scan QR





CHALLENGE

wheelchair accessibility for portable toilet trailers. This automatically eliminates many traditional plumbing solutions.

#### SOLUTION





The Saniaccess 2 is quiet, easy to install and offers the convenience of a flush toilet

# Modular, tiny home finds perfect solution to its long-distance plumbing drainage problem

Well-known to the modular house community. Mario shares his renovation and builder knowledge at workshops and festivals around the country. The couple is not only passionate about building these homes, but they also love living in them. After residing in their first tiny home for four years, the couple recently decided they needed more space and began construction on a new, slightlylarger-but-still-tiny house.

Faced with the challenge of connecting to a septic system some distance away from where they were building, Mario and Ciarra explored a couple of options that would make the bathroom of their modular home feasible. The search for the perfect solution led the Sotos to the **Saniaccess 2**, a macerating toilet system made by Saniflo that could pump effluent the required vertical and horizontal distance. "I was impressed," says Mario. "This product opened our eyes — no other toilet would work so well for our unique situation."

The **Saniaccess 2** will pump away effluent up to 15 feet below the sewer line or up to 150 feet from a soil stack that drains into a sewer system or a septic tank. Intended to handle black-water waste from a toilet, the **Saniaccess 2** will also discharge gray water from a second fixture, such as a sink. As a consequence the **Saniaccess 2** is most often used to create a smaller half-bathroom in residential applications like that of the Soto family. In their case, the **Saniaccess 2** was placed directly behind the toilet, eliminating the need to break through the wall.

After reading the "really simple instructions and easy-to-follow diagrams," Mario and Ciarra were able to assemble the system themselves in under an hour. By the time professional plumber Steven Davisson of Plumbing Kings LLC arrived on the job site, "everything that would normally take me time was set up and ready to go," he explains. All Davisson had to do was connect the discharge pipe and doublecheck that everything else was in its proper place.

How do the Sotos feel about their new bathroom now? "We have been telling all our friends about how much we love the **Saniaccess 2**," Ciarra says. "The operation is so fast and quiet, the system relieved our fears of a middleof-the-night loud flush in our tiny home."



The Soto family in front of their self-built and newly renovated tiny home.



The newly remodeled bathroom of Mario and Ciarra Soto's modular home.

For the complete case study, please scan QR



#### CHALLENGE

ST

Husband and wife Mario and Ciarra Soto make a powerful construction team. Their specialty? — Tiny homes.

Unlike the average American home, tiny homes usually have no connection to a municipal sewer system.

They have to connect to a septic system 100 feet from their new home — too far for conventional drainage.







The restaurant solves flood-plain plumbing challenge with Saniflo

# Above ground installation of a sump pump and grinder system in a restaurant to comply with FEMA regulations

The two-story restaurant sits on stilts and is surrounded by 45 boat slips, allowing customers to walk directly from their boats into the newly remodeled Widow's Den, a Key West-style outdoor bar on the bottom floor. Adding restrooms and an updated bar area were some of the major renovations included in the restaurant's recent remodeling project.

To accommodate up to 600 seats (300 upstairs and 300 downstairs), the restaurant's facilities have their work cut out for them. The Widow Fletcher's riverfront location resulted in a unique remodeling scenario. The project involved collaboration with not only the city, but also engineers and architects, to overcome a major obstacle: The building is eight feet below the floodplain.

"A big outside element, of course, is floodwater," says Spier. "If bay water gets into the local sewer system, it will create havoc throughout the city's lift stations and sanitary system." Plumber Frank Roman of Roman Plumbing says: "If you have a storm surge, the restaurant's lower level will flood. Therefore conventional plumbing wouldn't work, because you would be introducing the bay water into the city's sanitary system." With conventional plumbing not being an option, Spier and Roman had to find a cost-effective plumbing solution that would pump the wastewater, coming from the newly added plumbing fixtures, eight feet vertically to the existing upstairs plumbing lines.

Working with an engineer and Roman Plumbing, the project team considered a couple of different solutions. "Initially, we looked at possibly installing a large lift station to handle all the plumbing fixtures, but it was really cost prohibitive," says Spier. Nor were village officials thrilled by the idea. After several discussions with the plumbing company and local plumbing supply house Hydrologic Distribution Company, the project team decided to move forward with Saniflo's above-floor plumbing solution.

Based on the recommendation from the supply house and product recommendations from Saniflo, Spier felt comfortable installing three **Sanibest Pro** grinder systems for the male and female restrooms, plus a **Sanicom 1** drain pump to handle three hand-sinks and three tub dishwashing sinks for the bar.

"I felt very comfortable with the costversus-benefit comparison," says Spier. "In my own house, I have a space in the garage where I could use the system to add a bathroom, so that would be an excellent opportunity to use the **Sanibest Pro** again."



Sanibest Pro grinder units installed to discharge the wastewater from three toilets and a urinal. The two toilets in the women's restroom are each connected to a Sanibest Pro unit.

For the complete case study, please scan QR



#### CHALLENGE

The project involved collaboration with not only the city, but also engineers and architects, to overcome a major obstacle: The building is eight feet below the floodplain.

When a building is even one inch below flood plain, the plumbing must be equipped with backflow, and impervious to outside elements.

#### SOLUTION



Sanicom<sup>®</sup> 1



The homeowners wanted a basement that would match the high-end upper levels

# **Building contractor, plumber uses a** small, but powerful drain pump to overcome a big plumbing challenge

GMH Construction, a small family-owned contracting business, found their passion for remodeling homes in 1995. While they specialize in bathrooms and kitchens, working in Wisconsin offers them numerous opportunities for basement remodeling jobs as well. Built about five vears prior, the homeowners wanted a basement that would match the high-end upper levels they put so much time and effort into. Specifically, they wanted a basement bar for entertaining guests. To complete the bar. Perkins and his crew needed to add a bar sink. However, GMH faced a challenge. The drainage pipe coming from the new sink would have to connect to the existing basement bathroom plumbing.

to find a cost-effective solution to install drainage without breaking through the concrete floor. Ideally, they wanted a system that would pump the gray water from the sink 10 feet up and 14 feet over where it connects to an existing 3-inch discharge pipe running to the sanitary crock in the basement's mechanical room. Because of the home's lakefront location, with no city drains nearby, the sanitary crock is needed to move wastewater up and out to a universal drain.

When GMH learned about Saniflo's **Sanivite** drain pump, they immediately knew it would be the perfect solution to install a bar sink without breaking through the concrete to create conventional below-floor drainage. Designed for commercial and residential applications, the Sanivite is able to

discharge gray water away from a variety of fixture types.

According to Perkins, connecting the Sanivite was an easy and straightforward installation. "We really appreciated the pictures of the installation instructions, as well as a broken-down parts list," Perkins savs. "The images helped us when checking if we were

CHALLENGE

Avoiding the hassle and expense of busting through concrete. The drainage pipe coming from the new sink would have to connect to the existing basement bathroom plumbing.

SOLUTION



Sanivite<sup>®</sup>

To accomplish this, Perkins and his crew had two options. The first was breaking through the basement's concrete floor. "Typically, when a basement bathroom is pre-plumbed, it is not always in the perfect spot for an additional plumbing fixture." savs Perkins, Adding a new drain for the



Dane Perkins, Co-owner and Project Manager of GMH Construction is installing the newly Sanivite drain pump.

bar sink, roughly 20 feet away from the bathroom, would require an extra full day's work of cutting out concrete. This can be a labor-intensive, messy and expensive job.

The second option, which the crew felt was the best from the start, was finding a drain pump solution. "From day one, we wanted to use a drain pump. That was always the plan because it would be an easier installation and cheaper for the homeowners," Perkins says. They wanted

understanding the process and product correctly." Once installed, the system altogether was practically silent due to bumpers included with the product to isolate the noise and vibrations.

Perkins estimated that the homeowners saved close to \$2,500 and a full day's labor when he and Cooper chose to move forward with the Sanivite abovefloor drain pump solution. Saniflo truly earned my trust in their above-floor plumbing solution!"

For the complete case study, please scan QR



A 24-foot box truck equipped with two private full baths and laundry room

# Hope Vibes nonprofit promotes dignity in homeless community with mobile shower and laundry center

Founded in 2016 by Adrienne and Emmanuel Threatt, the organization was created after Adrienne watched and shared on social media a video depicting the challenges women living on the streets face when dealing with their menstrual cycles.

Initially, Adrienne, husband Emmanuel, and a few friends collected hygiene products to meet the needs of the homeless. Hope Vibes notes that, to this day, they receive personal hygiene product donations and welcome excited volunteers from all over the city and beyond. Even after providing personal hygiene products to their homeless community, the Threatts found one sad reality lingering in the backs of their minds. The people they were helping still didn't have the everyday pleasure of taking a shower, something Emmanuel counts as "a basic American right" and privilege most people take for granted.

"Our idea was to bring full bathing and laundry facilities to our homeless community, so that they don't have to leave the place they call home to take a shower," explains Emmanuel.

To provide a sense of privacy, safety and comfort to their guests, the Threatts and their friends sought to bring what started



Bathroom 1: Showing the shower's drain line connected to the Sanigrind Pro's 2-inch inlet.

as an idea on a whiteboard to life. This led to the purchase of a 24-foot box truck with enough room for not only two full baths and laundry facilities, but also a black and gray water tank for waste collection and a freshwater tank for onboard water supply.

When stepping into the Hope Tank, there is a bathroom to your left and your right. Each equipped with a shower, sink and toilet. The laundry facilities consist of a washer and dryer. "We simply translated our home-remodeling knowledge base to the creation of these mobile bathrooms, and applied the same design themes that we would use in a house," explains John Parker. To perform that task, John and his team installed two **Sanigrind Pro** grinder systems and the **Sanicom 1** drain pump from Saniflo.

Another big challenge was maximizing space, and Emmanuel says Saniflo offered the most space-friendly solution. "These units are so compact that nobody will even realize they're there."

Parker says he sees himself using the Saniflo solution in other situations. "A good amount of our client base is interested in basement remodels, and this is the perfect solution to easily create a new bathroom. "At the end of the day, the success of The Hope Tank relies on the strength of community partnerships, so we are thrilled that we were able to partner with Saniflo."



Hope Vibes provides mobile shower, laundry, and hygiene services for homeless people.

For the complete case study, please scan QR





CHALLENGE

Women living on the

streets face when

dealing with their

menstrual cycles.

They didn't have the

everyday pleasure of

taking a shower.

The main challenge was

to find a compact way to

plumb a bathroom in a

space where it

seemed impossible.

SOLUTION

Sanigrind<sup>®</sup> Pro

PPM Realty adds \$20,000 in value to home, using Saniflo Sanibest Pro grinder system

# Real Estate Agency Finds Cost-Effective Way To Plumb Basement Bathroom for Remodeling Project

As part of the remodeling and renovation side of the company, NextHome PPM Realty purchased an older home in need of renovation. "This particular project involved updating the home to increase the value and, eventually, to flip it," explains Pirain. The company's flip-crew performed a complete remodel on the kitchen, bathrooms, and flooring, as well as any needed mechanical updates.

The primary challenge: Sewage access was above grade and 40 feet away from the basement, which is situated about six feet below the sewer line. Installing conventional plumbing was impossible without installing a large sewage ejector system. That, in turn, would have required busting through the concrete to dig a pit to hold the system. Luckily, Pirain already knew about Saniflo's above-floor plumbing technology. "Years ago, one of our customers who used a Saniflo product for a project called and asked me about it," says Pirain, who did some research at that time.

The more recent product decision, however, was based on the recommendation of the local Saniflo sales agent: Brett Adelman of Triangle Sales. Pirain says he trusted the rep's judgment and product knowledge. "We frequently work with Triangle Sales for our renovations and new construction, since they handle a variety of plumbing products," explains Pirain. "Saniflo is one they recommended, so we thought we'd give it a shot."

Installation was done by professional remodeler Rick Martin, whose firm, Stonecrest Restoration, began with NextHome PPM Realty as a subcontractor doing stonework. "Over time, we formed a relationship, doing a couple of rehabs together with Rick serving as the general contractor," explains Pirain. Eventually, they entered into a partnership and started renovating and flipping properties. According to Martin, the Saniflo installation went smoothly. "It was pretty simple, and the system worked the way the manufacturer said it would." "I was amazed to see that the waste discharges through such a small pipe and how well the system functioned, despite that," adds Martin.

That enhanced value is on top of the substantial savings Pirain and his team gained by opting for the **Sanibest Pro** over the sump pump and pit alternative, which entailed the costly hassle of cutting into the concrete floor. "The time and expense of doing that did not make sense for us in this flip situation," says Pirain, who estimates the sewage ejector system's installed cost at "about \$9,000," versus approximately \$1,100 for the **Sanibest Pro**.

Would Pirain recommend the Saniflo solution to other property developers or homeowners looking to increase the value of a home? "Absolutely! We plan to use it in future renovations, and — to give you an idea — I actually have the product in stock right now and ready for our next above-grade sewer bathroom upgrade!"



- The lavatory is connected to a 2-inch inlet (bottom right on the unit), and the toilet is connected to the front of the unit.
- A 1-inch, PVC discharge pipe connects the discharge elbow at the top of the unit, running 6 feet vertically and 40 feet horizontally to the home's sewage access (*top left of the unit*).
- All plumbing codes require connection to a vent system, and the unit has an integral vent connection on the lid (top right).

For the complete case study, please scan QR



#### CHALLENGE

Installing conventional plumbing was impossible without installing a large sewage ejector system. That, in turn, would have required busting through the concrete to dig a pit to hold the system.

We knew that this option was not cost-effective, given what he expected to earn flipping the property: "Were we to go the sewage ejector route, the costs and time would've outweighed the return on investment." "If we couldn't find another solution, we would have skipped adding a bathroom entirely."

SOLUTION



## **Revelstoke Coffee shop owner** overcomes "nightmare" application challenge

find a solution.

The unusual name represents the founders' inspiration for the shop: a road trip through Banff National Park in Alberta, Canada, which found him in the tiny town of Revelstoke. Revel means to eniov oneself. Stoke means to consume for energy.

Owner Alex Stoyle liked the way those concepts fit together and came very close to having everything he needed to make his modern-style coffee shop come to life. He had the inspiration, the name, and an old space to renovate, but faced one major, unavoidable problem: plumbing.

Leasing in an almost two-hundred-yearold building, Stoyle knew it would be challenging to install a conventional. below-floor pipe line for the drainage of his equipment. He soon realized that going the conventional route would require

breaking through the floor - which wasn't really an option. given the building's age and the fact that there is a unit below them. "For us to run conventional plumbing, we would've had to ruin the unit below us and drill through the walls of



**Revelstoke Coffee** 

the building," he explains. "It would've been an absolute nightmare."

So Stoyle had to find an alternative solution that would allow for the drainage of all his equipment, which

For the complete case study, please scan QR



possible."

Luckily, the plumber recommended above-floor, drain pump technology without hesitation. Stoyle trusted the plumber's expertise and his recommendation to install Sanicom 1 drain pumps made by Saniflo. Designed for commercial and residential applications. "That's impressive compared to how long it would've

taken if we were to install conventional plumbing – assuming it were even possible!" According to Stoyle, "Other plumbers coming through the coffee shop would say: 'Wow, this is a great setup – I don't know if I would've even come up with this, but it's pretty cool."

includes two espresso machines, a

dishwasher, an ice machine, a three-

base sink, two prep sinks, and a reverse

osmosis water filter. Stoyle opted to call

a local plumbing contractor, hoping to

Stoyle reports that the system has performed well. "The thing I'm most impressed by is how quiet the pumps are," he says

themselves facing a similar application

commercial-kitchen applications where

challenge? "Definitely. The Sanicom 1

units are an excellent solution for

conventional plumbing just isn't

enthusiastically. "They run in the background, but they don't interrupt conversation. "And. to tell you the truth, I really like the way they look. because I love that kind of mechanical look." he adds. Would Stoyle recommend Saniflo to other entrepreneurs who find



CHALLENGE

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Sanicom<sup>®</sup> 1

The existing drain line is located above the doorway almost 30 feet away

## Heavy-duty commercial drain pump makes bar renovations possible in a brewerv

**Revival Brewery Company** provides a distinctive craft beer experience that appeals to everyone. It is a renewal of brewmaster Sean Larkin's passion for unique and innovative craft beers, cultivated over twenty years of creating signature brews for the preeminent breweries.

Though he'd been thinking about striking out on his own for a few years, it was an introduction to avid home brewer Owen Johnson in late 2009 that set in motion what would become Revival. After many nights of brainstorming, Revival Brewery Company decided to reinvent itself in a post-pandemic world with the timeless combination

of beer and pizza. The owners created Revival Brewing & Lost Valley Pizza, a brewpub and pizzeria located in the Valley.

After reopening the brewpub in a new building, the owners had various projects lined up to improve the space, including additional bathrooms and a new bar area. However, the brewerv's new location posed a difficult plumbing situation. According to Geoff

O'Leary, owner of O'Leary Plumbing & Heating, they had originally planned to install traditional underground drain lines, but "during the initial construction of the brewery, they utilized a space without any plumbing plans available, so we had no idea what the plumbing setup looked like," explains O'Leary.

"We knew there were drain lines in the floor, but we didn't know where we wanted to install the restrooms

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Pizza.

The Saniflo's Sanicubic 2 handles two unisex restrooms at Revival Brewing & Lost Valley



or the bar area," he continues. "We later realized the concrete was three feet thick, making any new plumbing installation particularly difficult and expensive." Thankfully, O'Leary knew of a product he had been using over the entire span of his 20-year plumbing career: Saniflo's above-floor plumbing pumps: a solution that would allow them to install plumbing without needing to break through that 3-inch thick concrete to install new drain lines.

After presenting the challenges they were facing at the brewery to manufacturers representative Walter F. Morris, they introduced him to Saniflo's commercial line of drain pumps and lift stations. A Morris representative recommended Saniflo's Sanicom 2 to handle the drainage for a new bar area.

> Walter F. Morris also recommended Saniflo's Sanicubic 2 to handle two unisex restrooms. "Depending upon the length of your run into a drain line, it could take as little as an hour to install the **Sanicom 2**," says O'Leary approvingly. "But it was a 12-hour job for us at the brewery, because we had a lot of piping to run and had to install ventina."

According to O'Leary, the installation was

very easy and went smoothly for him and his team. "We effortlessly connected the drain lines to the pump and installed a shut-off for the ejection side for maintenance down the line," he says, adding, "I was amazed how high and far the **Sanicom 2** is able to pump the drain water to the sewer line, yet the unit itself tucks right under the bar." O'Leary reports that "the bar is now up and running, and the owner's feedback has been unbelievably positive".

#### CHALLENGE

"During the initial construction of the brewerv. they utilized a space without any plumbing plans available". The concrete was three feet thick, making any new plumbing installation particularly difficult and expensive. The brewery faced additional issues when they had to add a sink close to the pizza oven.



Sanicom<sup>®</sup> 2



Sanicubic<sup>®</sup> 2

Manufacturer chooses Saniflo for ADA-compliant public restroom and shower trailers

# Installed in a drop-in trailer to accommodate long-term, heavy-duty use by the general public.

Montondo Trailer was founded in 2014 by Jack Montondo, who built the business like he builds his trailers - from the ground up. His company specializes in creating custom restrooms, showers, and speciality trailers. Each trailer is built in-house, which allows Montondo to have complete control over the design and the material used.

The wheelchair-accessible trailers don't use Montondo's typical plumbing solution that pumps discharge underneath the trailer into a waste tank. Because there needs to be room for a wheelchair ramp, the discharge must pump up and through the floor to the back of the trailer where the waste tank is located. As a consequence, Montondo had to find a mobile plumbing solution to accommodate an occupant with disabilities, while also providing above-floor drainage for the toilet or shower through the back of the trailer.

Montondo ultimately chose the Sanibest Pro and the Sanigrind Pro grinder systems, as well as the Sanishower drain

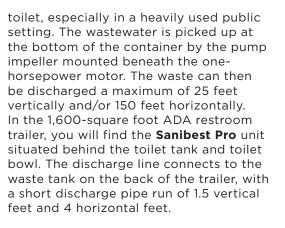
pump to provide black water and gray water drainage for their ADA-type trailers. The Saniflo arinder system Montondo installs depends on the customer's trailer-size preference, which impacts the length of the macerating system's discharge pipe run. The Sanibest Pro is a heavy-duty

grinder engineered to quickly dispose of larger objects that might well clog a conventional



View of the plumbing set up below the trailer's finished floor frame.

For the complete case study, please scan QR Saniflo **©SFA** 



In some of the ADA restroom trailers, Montondo installs Saniflo's Sanishower drain pump. This residential and commercial pump can discharge gray water waste up to 12 feet vertically and 100 feet horizontally. It moves the water to the waste tank located at the back of the trailer before it is disposed of. The water source for the shower and the sink faucets comes from the 200-gallon fresh water tank inside each trailer.

Installation is straightforward, whether installing the Sanibest, the Sanigrind or the Sanishower. They fit the application perfectly." We haven't had any issues with the pumps installed."



The Sanishower drain pump is small enough to fit comfortably under a raised shower base.

#### CHALLENGE

Find a mobile plumbing solution to accommodate an occupant with disabilities, while also providing abovefloor drainage for the toilet or shower through the back of the trailer.

### SOLUTION



#### Sanibest<sup>®</sup> Pro



#### **Sanigrind®** Pro



Sanishowe

A pet spa installs Sanivite Pump for effective drainage of two large bathing tubs

# A pet spa installs Sanivite Pump to handle the high volume of dog hair coming from two large bathing tubs

that wav.

"I needed something that could handle all

the dog hair." savs Martin. "Even though

we use traps, hair gets through." And,

again, given his space requirements, he

had "to find the smallest pump possible."

Finally, the type of adjustable tubs Martin

had purchased needed a low entry point

for draining the wastewater. "I couldn't have it go into a macerator pump with

explains Martin, "because I couldn't get

the pump close enough to the ground

a bottom pump and a bottom float,"

Martin conducted an online search that led him to Saniflo's drain pump

technology. After considering other options, Martin realized none offered

recommended the **Sanivite** drain pump

as complete a package as Saniflo. He contacted a local Saniflo rep who

for the application. "I felt that the

Recognized as "Palm Beach's Best New Business" by the Palm Beach Chamber of Commerce, family-owned and -operated On Blonde Pet Spa and Boutique has built a stellar reputation for dog grooming and spa treatments.

During a recent expansion and remodel of the leased space. owner Michael Martin realized the 12 x 15-foot room he planned to use as the bathing department sat 12 feet away from the building's sewage access pipe. His drainage options were very limited.

"We have the space measured down to the inch," says Martin, explaining why conventional drainage was a problem. "I had a very finite amount of room, and I

needed to be able to fit every piece of bathing equipment in that room."

Option No. 1 involved installing a new floor drain in the 100-yearold historic building. But that would require breaking through the concrete - not something Martin wanted to do, given the building's age, as well as the likely expense. Prior to the remodel, the pet spa used a very large, in-ground-type, macerator pump, which inspired Option No. 2: Install a much smaller drain pump that didn't need much space, but was still powerful



The 1.5-inch rigid pipe connected to an existing PVC discharge pipe running to the building's sewage access.

enough to handle the high volume of dog hair produced daily. The idea was to pump gray water away from the two large tubs through plumbing situated above not below - the floor.

its installation in late 2019, according to its owner. "We use it for eight hours a day. and we've had no problems," says Martin. "On Blonde Pet Spa would, without a doubt, recommend Saniflo to others!"

For the complete case study, please scan QR



#### CHALLENGE

I is a very finite amount of room, and we needed to be able to fit every piece of bathing equipment in that room. We needed something still powerful enough to handle the high volume of dog hair produced daily. The idea was to pump gray water away from the two large tubs through plumbing situated above not below — the floor.

#### SOLUTION



Sanivite<sup>®</sup>

company took the time to figure out what I needed, as opposed to selling me the most expensive products," says Martin. Designed for commercial and residential applications. the Sanivite is able to discharge gray water away from a variety of fixtures up to 16 feet vertically and/or 150 feet horizontally. Small enough to fit inside a kitchen cabinet, the unit was designed to sustain the toughest applications, including a large volume of dog hair.

The Sanivite has performed well since

A cost-saving plumbing solution for research vessel in the Caribbean

# **Remakes faulty four-toilet** plumbing system on an 80-foot teaching vessel

MANTA (Marine Science And Nautical Training Academy), a non-profit organization offers a summer Caribbean field study course on the biology and the conservation of coral reefs. President of MANTA. knew he had to fix a serious plumbing problem.

To perform that task, MANTA installed a **Sanicubic 1** Simplex Grinder System, donated by Saniflo. Day extensive researched various systems, including conventional sewage ejector packages. One option included a Duracast polypropylene tank that required creating new pipe connections and the installation of a small pump and float switch. Moreover, Day would've had to fabricate a custom tank to specific dimensions because the vessel's mechanical room had only

limited space for another piece of equipment. "It was looking like a real headache,"says Day. When Day found the Sanicubic 1 online, he knew it was the perfect solution. Shipped fully assembled, the compact, heavy-duty lift station offered better arindina performance with the capability of pumping up to 50 gallons of effluent per minute.



Inside the RV MANTA's mechanical room, showing the Sanicubic 1 and the 1.5-inch PVC piping to two of the Sanicubic 1's four input ports.

Furthermore, the highly durable plastic enclosure for its pump and grinding blade incorporates four different exterior inlets for incoming waste lines, as well as sophisticated controls and a monitoring system to mitigate servicing issues. The Sanicubic 1 is rated IP68 and comes with an external control and alarm.

Back on land, the system is designed for applications where the sewer line or the septic tank sits above or away from the structure. Featuring a one-horsepower motor and a fast-rotating stainlesssteel cutting blade, the Sanicubic 1 minimizes the possibility of clogs by quickly reducing solids - including larger sanitary products - into a slurry that can be pumped up to 36 feet vertically or 328 feet horizontally through a 1.5-inch, rigid pipe.

Once at sea, the blackwater tank will be evacuated every several days through another length of 1.5-inch PVC discharge pipe with the help of an existing macerator pump (not made by Saniflo). The frequency depends on where the RV MANTA docks, because, according to Day, the blackwater pump-out facilities in the British Virgin Islands can be fairly limited. In most areas, the vessel will go offshore to discharge the blackwater tank into waters offshore where this is

permitted. According to Day, the Sanicubic1 system has performed beautifully after testing it on other trips. Even though the system was generously donated, the Sanicubic 1. installed, still would've been the more economical choice, compared with fabricating a custom system, according to Day. He praises the reliability and "plug-and-play"

feature of the system, since it removes the uncertainty of a piecemeal solution and concerns about unsanitary leaks and odors. "The ease of installation saved considerable labor costs," adds Day. "The product is outstanding, and the customer service, technical support and followup at Saniflo have been exemplary," he continues.

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previously used air pressure to drive effluent from the toilets into a blackwater tank. The Microphor specifications recommend no more than 18 inches of vertical rise for the 60 psi capacity of the system. But the blackwater tank sits 6 feet above the waste lines, thus exceeding the system's

lifting capabilities. Each teaching expedition would involve 16-18 people living and working on the vessel for days at a time. .....



Sanicubic<sup>®</sup> 1

Saniflo duplex vortex lift station is installed at historic Yukon riverfront hotel

# Three new washrooms, two unisex stalls, and one handicapped bathroom, each with a sink and water closet

The historic Edgewater Hotel overlooks the majestic Yukon River, with a lineage tracing back to the Klondike Gold Rush. This particular gold rush between 1896 and 1899 involved a migration by an estimated 100,000 prospectors to the Klondike region of the Yukon in northwestern Canada.

In 2017, the hotel underwent a \$2.2 million (Canadian) renovation, offering thirty-three upgraded rooms and suites, each with a new washroom featuring fully tiled showers and glass doors. But the upgrades did not end there, as hotel ownership recently decided to add a completely new wine

bar to its list of amenities. The Belly of the Bison wine bar is slated to open in June/July 2021.

The wine bar will have three new washrooms. two unisex stalls. and one handicapped bathroom, each with a sink and water closet to accommodate quests. The handicapped bathroom also has an emergency floor drain with a trap primer. The Edgewater Hotel project, in particular, posed some unique problems. According to Albanese, the job entailed rerouting drainage from a cast iron soil pipe stack to the side of the building, while also picking up the drainage from the three new winebar washrooms. "With the new washrooms added to the wine bar. I could not make the grade to tie the drainage back into the main drain line."

explains Albanese. "Along with that issue, there was no way to get around two large supporting beams for proper drainage." Conventional plumbing wasn't feasible. "I didn't need to look far for a solution after explaining the situation to another contractor, who recommended Saniflo," Albanese says. Following a quick search on the Saniflo website, he called Saniflo Technical Support and explained the drainage issues. "That same day, I had the recommended Saniflo **Sanicubic 2VX** Vortex unit on order from my supplier and ready to be shipped."

The **Sanicubic 2VX** uses a specially designed pump impeller to create a vortex action as the effluent enters the lift station enclosure. This technology keeps solids away from the impeller as it turns, pushing waste rapidly through



The drain lines coming from the washroom loads and the load from seven hotel suites running to the Sanicubic 2VX.



Albanese installed the Sanicubic 2VX in the hotel's basement. The 4-inch discharge pipe runs from the top of the Sanicubic 2VX 10.5 feet vertically and 25 feet horizontally before tying into the existing drain line.

For the complete case study, please scan QR



the pump and to the discharge pipe. In doing so, the possibility of clogging is substantially reduced. With up to 250 gpm flow rate, the maximum height either pump can discharge is 36 feet, using two-inch diameter pipe; and 20 feet, using four-inch pipe.

To keep the hotel operational, the Albanese Mechanical team blocked off time at night to cut into the line and test and commission the Saniflo unit. "The hotel was able to run normally after the testing was complete," he says. "The unit allowed construction to continue on this job while the hotel carried on with minimal downtime," he continues. "It will also allow my customer to operate the new bar and will give them flexibility on when to start the basement renovation."

#### CHALLENGE

Contractor Bryan Albanese overcomes unique plumbing challenge at the Edgewater Hotel by installing a Saniflo Sanicubic 2 Vortex to reroute drainage from 29 different plumbing fixtures, while minimizing downtime and keeping the hotel operational. With the new washrooms added to the wine bar, we could not make the grade to tie the drainage back into the main drain line.



The company chose an above-floor macerating system from SANIFLO®

# Develop MonoPan portable washroom units that are barrier-free/wheelchair accessible

"In our previous washroom designs, we had to place tanks under the floor, which worked well but presented some difficulty in manufacturing and maintenance," says Frank, MonoPan CA Inc. "By using the **Sanibest Pro**, we can place waste tanks at floor level in the back of the units,

makina them easier to manufacture and maintain: and, by doing so, have significantly lowered the height of our units." Reducing the height from the ground to the bottom of the door is very important for wheelchair access and allows for the installation of an access ramp at the recommended 10-degree slope.

For Frank and his company, this has meant cost-savings in both manufacturing time and material expenditures. Not only is the **Sanibest Pro** easy to install, it is equipped with a service panel atop the unit which allows for quick and easy maintenance.

Barrier-free washrooms are designed to enhance accessibility and comfort for people with physical limitations or disabilities. Businesses are under increasing pressure to comply with codes, regulations and standards with

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Sanibest Pro installed in portable washroom unit.



Saniflo's elongated rear discharge toilet is ADA compliant which facilitates the installation of all the bathrooms.

For the complete case study, please scan QR



respect to the design and manufacturing of barrier-free washroom facilities. "Our elongated style of vitreous china, rear-discharge toilet bowl and tank has a seating height of 16-3/4", making it ADA compliant to assist people with sitting and standing up," says Canada's National Sales Manager.

"The **Sanibest Pro** and elongated toilet work together as a complete system,

and make a great solution for this type of washroom application".

The Sanibest Pro is designed to be easily installed on top of any finished surface, eliminating the need for belowfloor installation. While most of SANIFLO's pump range is shredders/macerators. the Sanibest Pro incorporates an actual grinder system, making it ideal for heavy use situations in which you do not control the use of it. The system uses minimal amounts of water and can handle the effluent from both the toilet and a sink connection

"Not much else is suitable for our application or available on the market," continues Frank. "Our portable washroom facilities are unique in both function and appearance and SANIFLO has helped to enhance this. The units we've sold so far have been well received by our customers."

#### CHALLENGE

"In our previous washroom designs, we had to place tanks under the floor, which worked well but presented some difficulty in manufacturing and maintenance," Reducing the height from the ground to the bottom of the door is very important for wheelchair access and allows for the installation of an access ramp at the recommended 10-degree slope.



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Sanibest® Pro

# NOTES


# NOTES

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